Sound Transit
2021 DRAFT Service Plan

September 2020

SoundTransit

Table of Contents

Introduction **1**
2020 COVID-19 Response **3**
Draft 2021 Service Plan **11**
Title VI Analysis **19**
Summary of Changes by Route Group **23**
Link (University of Washington – Angle Lake) 23
Tacoma Link 25
Sounder North 27
Sounder South 29
Routes 580, 596 (Sounder Connectors) 31
Routes 510, 511, 512, 513 (I-5 North) 33
Route 522 (SR 522) 37
Routes 541, 542, 544, 545 (SR 520) 39
Routes 550, 554 (I-90) 43
Routes 555, 556 45
Routes 532, 535 (I-405 North) 48
Routes 560, 566, 567 (I-405 South) 51
Route 574 (I-5 South) 54
Routes 577, 578 (I-5 South) 56
Routes 586, 590, 592, 594, 595 (I-5 South) 58
Appendix : Definitions & Methodology for Title VI Analysis **A-1**

Introduction

Background

Each year, Sound Transit prepares a Service Plan that guides delivery of ST Express bus, Sounder commuter rail, and Link light rail services. In coordination with the annual agency budget process, the Service Plan provides both a forward look at future service plans and a review of recent ridership and performance trends. Note that due to the current COVID-19 pandemic, these ridership and performance trends have drastically changed with new travel patterns and reduced overall transit demand. Therefore, ridership and performance sections traditionally included in past service plans are not included in the current plan.

This year's Service Plan focuses on what transit service will look like in 2021 given the COVID-19 pandemic and the on-going recovery. The COVID-19 pandemic has placed a number of constraints on providing transit service. With decreased ridership and the need to utilize financial resources efficiently, a number of tough trade-offs will be required when determining what service will look like in 2021. We are carefully looking at where services are needed most, where demand might increase, and which passengers depends on our services the most.

At the same time, we're looking ahead to the opening of Link light rail extension to Northgate, opening in September 2021, and are considering how to re-route services to the three new light rail stations in North Seattle.

Passenger and community input are part of every annual Sound Transit service plan process. This year's public involvement process will help Sound Transit understand how recent changes in light of the COVID-19 pandemic have affected riders and whether proposed changes will meet their current and future travel needs. Public input will be considered alongside ridership and demographic data to ensure that the proposed changes serve passengers to the greatest extent possible.

Contents

2020 COVID-19 Response

This section summarizes the regional response to the COVID-19 pandemic, the associated service reductions resulting from lower ridership and operator availability, and the subsequent response by Sound Transit to return to service once travel trends have stabilized.

Proposed 2021 Service Plan

This section identifies proposed changes to Sound Transit services in 2021, including context of why changes were proposed as well as key themes that will guide service strategies for the next several years. This section also summarizes resources required to operate all lines of service.

Service Equity Analysis

This section evaluates the 2021 Proposed Service Plan proposals to ensure that changes to transit service are consistent with Title VI policies.

Sound Transit Services

ST Express

ST Express bus offers fast, frequent, two-way service on 28 routes connecting Snohomish, King, and Pierce Counties. Sound Transit provides this bus service via service agreements with our transit partners: King County Metro, Pierce Transit, and Community Transit. ST Express provides service to over 50 transit centers and park-and-ride lots.

Sounder

Sounder commuter rail spans three counties, serving commuters on the north line from Everett to Seattle and on the south line from Lakewood to Seattle. Sound Transit owns the railway between Lakewood and Tacoma, and Burlington Northern Santa Fe Railway, owner of the railroad between Tacoma and Everett, operates Sounder service under a contract with Sound Transit. Amtrak provides maintenance for the Sounder fleet of locomotives and passenger cars.

Tacoma Link

Tacoma Link light rail is a 1.6-mile light rail passenger line that runs through the heart of downtown Tacoma. There are six unique stations complete with artwork that reflects the history and community of Tacoma. Trains run every 12 minutes during the day on weekdays and Saturdays, and every 24 minutes on Sundays all day and weekdays during the early morning and evening hours.

Link

Link light rail operates on over 20 miles of alignment between the University of Washington Station in the City of Seattle and Angle Lake Station in the City of SeaTac, serving 16 passenger stations, including four stations in the Downtown Seattle Transit Tunnel (DSTT). In September 2019, three new stations will open on Link light rail, bringing service to U. District, Roosevelt, and Northgate Stations. King County Metro operates and maintains the system through an intergovernmental agreement with oversight by agency staff. Paratransit service is also operated by King County Metro within the Link service area.

2020 COVID-19 Response

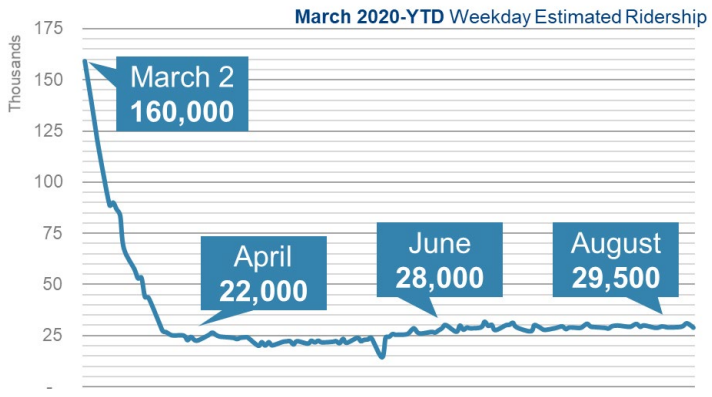
Responding to an Unprecedented Situation

Transit agencies in the region and across the world have faced unprecedented challenges during the COVID-19 pandemic with the decrease in ridership and declining revenue. At the same time, transit agencies have needed to ensure that people accessing essential jobs and other everyday needs continue to have a reliable and safe option.

Ridership began to fall even before Washington's stay-at-home order as employers recommended or required employees to work from home. Sound Transit bus and rail network ridership had declined by 85% when ridership was at its lowest in late April and early May. Emergency reductions reflecting this large drop in ridership were made, forming a "basic network" that emphasized preserving coverage and span of service while being cognizant of the financial resources to operate service.

In summer 2020, some restrictions to stay-at-home order were lifted, and passengers began to return to Sound Transit services. Significant part of this ridership gain came from routes serving South King County and Pierce County. Service was partially restored on some routes, and trips were increased on routes that were seeing gains in ridership. The September 2020 service change will have additional service increases on some routes, including Link light rail, Sounder South, and ST Express routes experiencing higher demand.

Drastic Ridership Decline

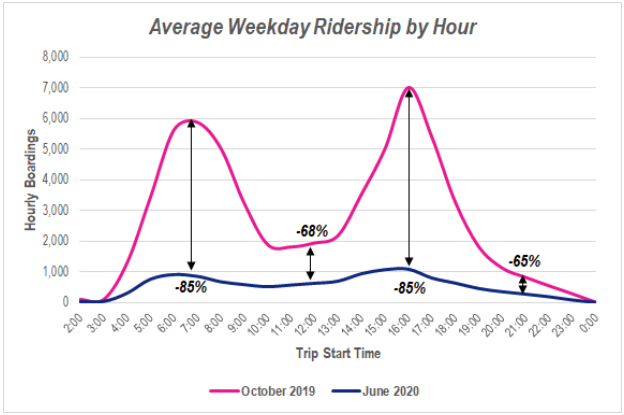


Ridership began falling in early March as employers imposed work-at-home orders and the subsequent Washington State's stay-at-home order. Ridership hit its lowest numbers in late April spanning into early May. By the first week of May, Sound Transit was carrying approximately 21,000 daily weekday passengers, a reduction of over 85% compared to pre-pandemic numbers. As Puget Sound counties entered into Phase 2 of Washington State's Safe Start re-opening plan, modest increases in ridership began to take place as businesses re-opened in a limited fashion.

On-going tracking of daily ridership from the beginning of the COVID-19 pandemic allowed service planning to identify the following trends in ridership.

Ridership declined most from peak periods.

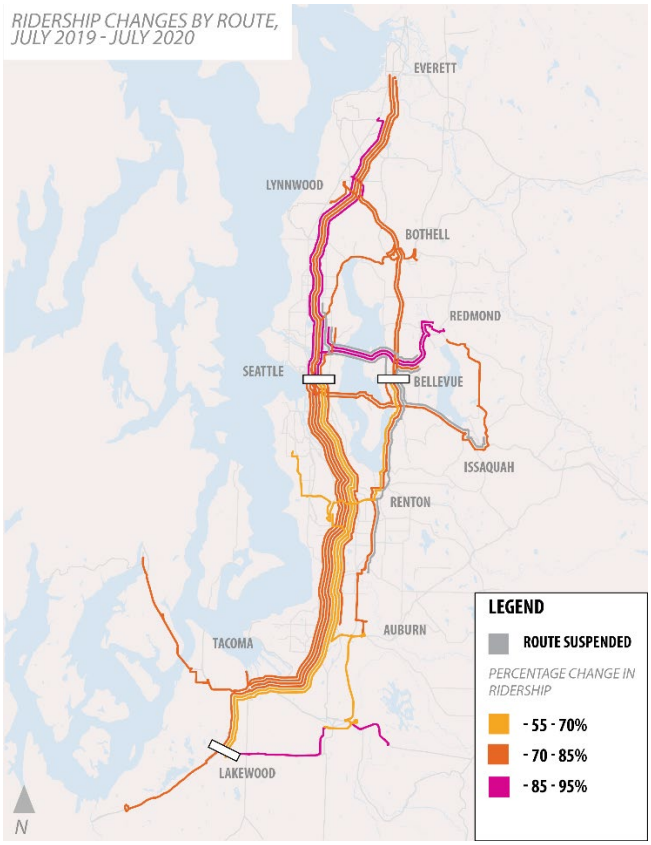
Ridership declined the most from the peak periods, suggesting that a significant contribution of the decline was from people now working from home as opposed to commuting. The degree to which midday and evening ridership declined was significantly less, suggesting that

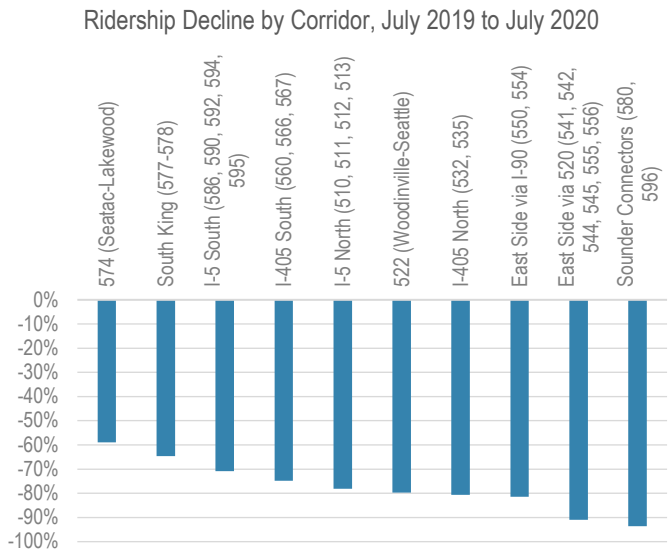


people using the network throughout the pandemic have been accessing essential jobs that cannot be done from home and people accessing everyday necessities such as grocery shopping and medical appointments.

Ridership declined least on all-day Pierce County and South King County corridors.

Ridership declined to varying extents across the network. All-day routes serving Pierce County and South King County experienced the least decline compared to other corridors in the system. East King County routes that cross SR 520 and primarily serve “tech” centers experienced some of the larger declines in ridership.



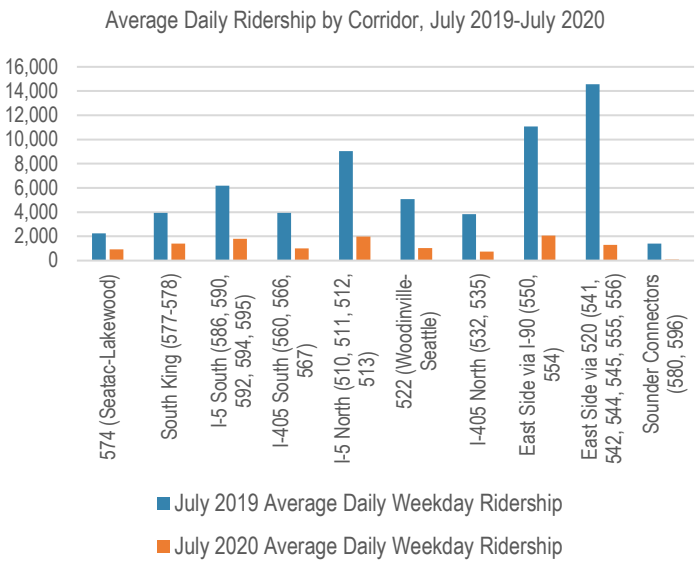


Routes focusing on park-and-rides had the greatest decline in ridership.

Routes focusing primarily around park-and-rides had significant declines in ridership. Sounder Connector routes (580 Lakewood-Puyallup and 596 Bonney Lake-Sumner) both had the largest decline of any route group. These routes serve park-and-ride facilities at satellite locations, which normally served as overflow lots when those at Sounder stations were at capacity. Since ridership is significantly reduced across the network, there is less need for people to use these satellite parking lots. Similarly, Route 513 (Seaway TC-Seattle), whose ridership in 2019 was primarily from Snohomish County park-and-ride lots, saw significant decline in ridership.

Despite having some of the largest declines in ridership, some East King County-Seattle routes remained important regional connections.

East King County routes had some of the largest declines compared to other routes. However, despite the drop in ridership, the I-90 corridor still serves about 2,000 daily weekday riders and the SR 520 corridor serves 1,300 daily weekday riders. This highlights that even though ridership has dropped by a larger degree in these areas, these routes continue to be important regional connections for riders.



.

Emergency Service Reductions to "Basic Network"

Criteria and Decision Making

Social Distancing

In order to facilitate social distancing on ST Express buses, operating transit agencies imposed capacity restrictions. Capacity limits ranged between 12 and 37 passengers depending on the fleet size, with standard 40-foot buses having the lowest capacities and double-deckers having the largest. These social distancing measures placed a large constraint on providing a basic emergency network.

Equity

Emphasis was placed on maintaining higher levels of service on routes that had higher number of riders that depend on Sound Transit's services, including seniors, people with disabilities, Title VI protected populations (on the basis of race, color, national origin), low-income and limited-English-proficiency populations, as well as essential workers who could not tele-commute.

Preserve Span of Service and Coverage to the Extent Possible

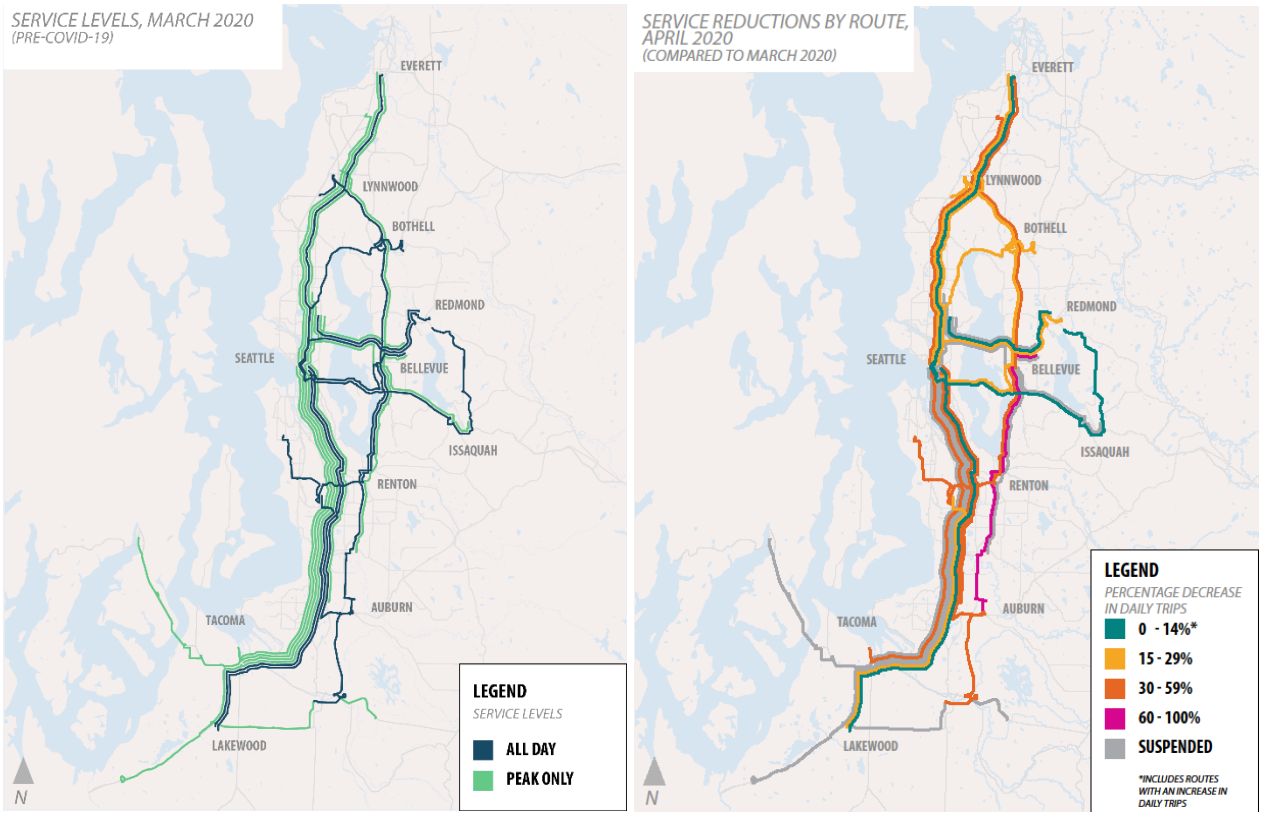
Maintaining geographic coverage and hours of service to the fullest extent possible was a crucial factor to what routes and periods had trip reductions. As ridership declined most from the peak periods, most reductions of service came from the rush hour periods.

Service Reductions

ST Express

With the large decline in ridership and being cognizant of the resources available, Sound Transit reduced the number of trips operating on the ST Express network, with most trip reductions coming from the peak periods. Some peak hour routes were suspended where service was duplicated by other routes, such as Route 544 (Overlake-SLU), which acts as a rush hour overlay service on top of all-day Route 545 (Redmond-Seattle). With the exception of some areas served by Route 592 (DuPont-Seattle), 595 (Gig Harbor-Seattle), and 596 (Bonney

Lake-Sumner Sounder connector), coverage by one or more route was preserved in this initial set of reductions implemented in April.

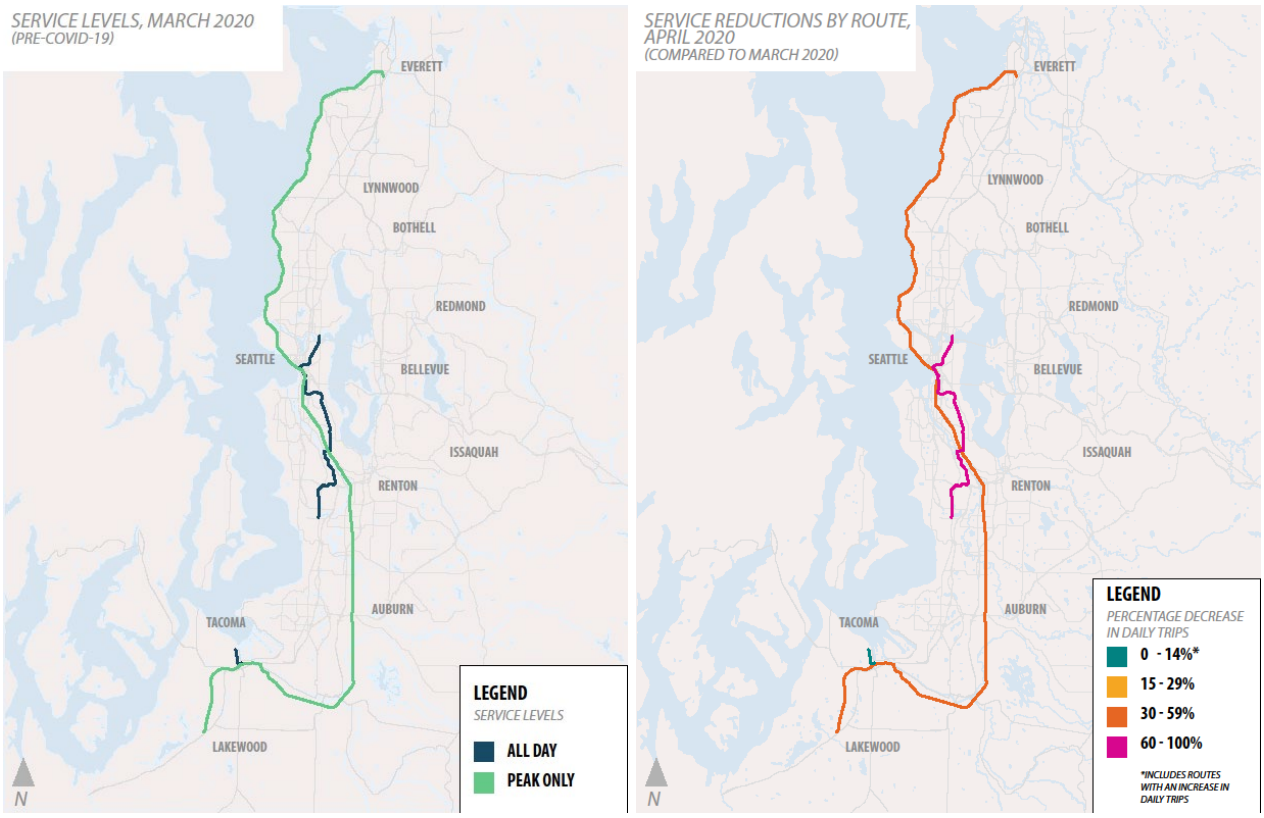


ST Express service reductions by route (April 2020)

Link light rail and Sounder

On Link light rail, service was reduced to every 30 minutes at the lowest point in April, and subsequently increased to every 20 minutes in June as ridership started to show some modest increases. Tacoma Link, has continued to operate at its regular 12-24 minute schedule.

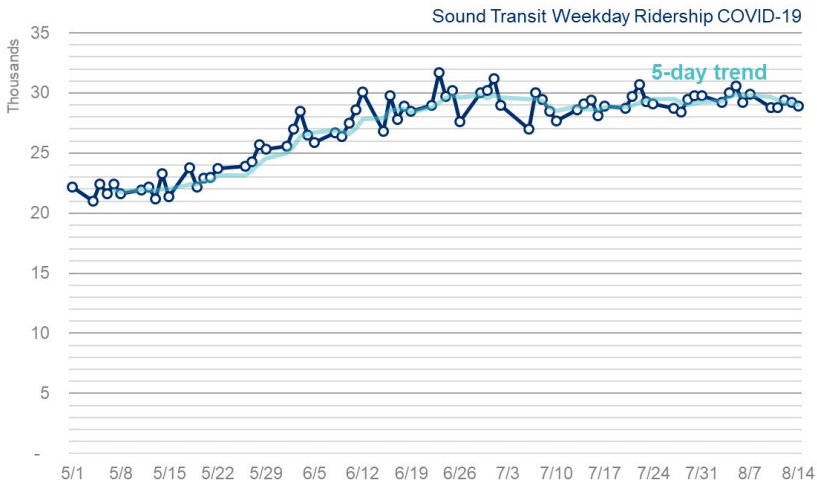
On Sounder, trips were reduced to four daily trips on the Everett-Seattle route, and 14 daily trips on the Lakewood-Seattle route.



Sounder, Link light rail, and Tacoma Link service reductions by route (April 2020)

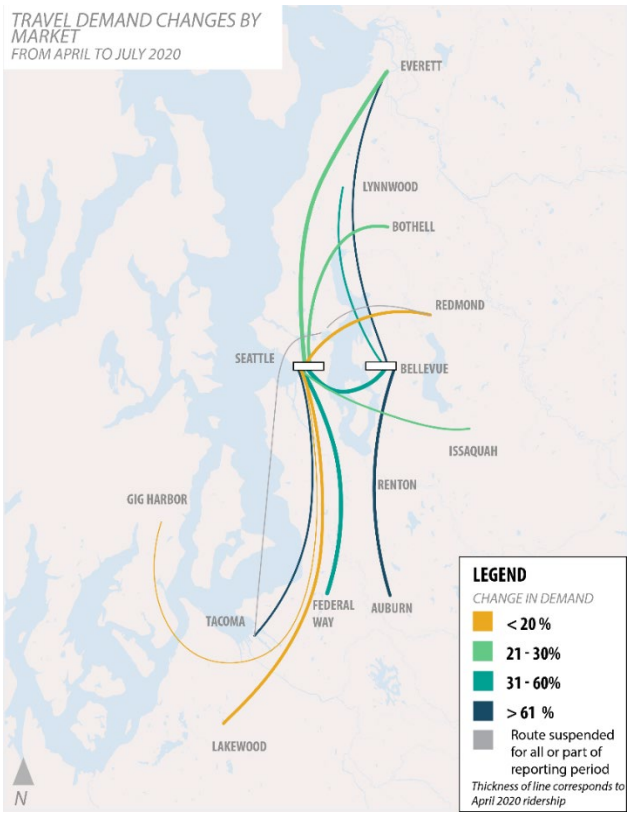
Return to Service

Phased Re-Opening Leads to the Modest Return of Demand



There has been a modest increase in travel demand as some industries return to work. Approximately 7,000 more weekday boardings occurred daily in mid-July compared to the lowest point of 21,000 riders in late April and early May.

Construction activity resumed on April 29, and as part of the statewide Safe Start plan, Phase 1 allowed for additional services such as retail for curb-side pick-up to restart in early May. In June, limited re-opening of some industries included in-person dining, retail, personal services, and professional services at reduced indoor capacities. The resumption of activities coincided with some modest increases in ridership on the network, particularly on ST Express routes serving Pierce County, South King County, and some Snohomish County routes.



New Service Additions to Meet New Travel Patterns

As ridership started to modestly rebound, some routes began to become over-capacity with the social distancing measures that capped the number of passengers per vehicle. An adjustment to service was made in summer 2020 and again with the September service change to address routes that were reaching capacity limits. Service planning utilized the following criteria to identify the routes that were in the most need of trip restorations.

Decision Criteria for Service Adjustments

Demand	**Ridership Trends** Monitor daily ridership by route and trip
	Anticipated Demand Use information from employers about return-to-work plans.
	Essential Workers Increase access for workers where teleworking is not an option.
Equity	**Title VI** Prioritize preserving services for low income, minority and limited English proficiency populations.
	Transit Reliant Prioritize services for populations with disabilities, without access to vehicles.
Capacity	**Financial Responsibility** Identify opportunities to maximize efficiency and productivity.
	Fleet Availability Vehicle types available, janitorial staffing levels, assignments by day by route.
Safety	**Social Distancing** Make every effort to follow health department guidance on social distancing and policies established by operating partners

Service Restorations in Summer 2020

Trips were added in late May to accommodate the modest growth in ridership. In addition, several routes that had been suspended at the beginning of the stay-at-home order were restored. With the restoration of Routes 592 (DuPont-Seattle) 595 (Gig Harbor-Seattle), and 596 (Bonney Lake-Sumner), ST Express was covering all areas that were previously served pre-pandemic, although with some routes still suspended, some trips required a transfer.

Because of capacity restrictions to ensure social distancing, trips were restored to accommodate the growth in ridership. Routes 578 (Puyallup-Seattle), 574 (Lakewood-SeaTac), and 590 (Tacoma-Seattle) had additional trips restored in May to try to minimize the number of pass-ups, however, given the social distancing capacity restrictions, pass-ups continued to be a challenge through the summer.

Social Distancing

In order to maintain social distancing, vehicle capacities have been lowered based on the operating partner's policies. Capacity limits range from 12 passengers to 37 passengers depending on the vehicle type.

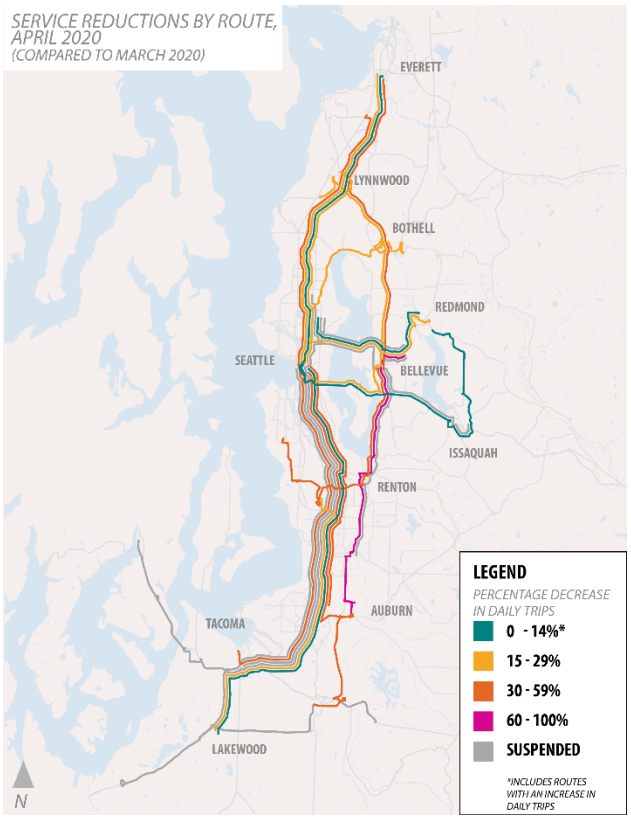
As ridership returns, maintaining social distancing while reducing pass-ups was a primary factor of where service was added in summer and September 2020.

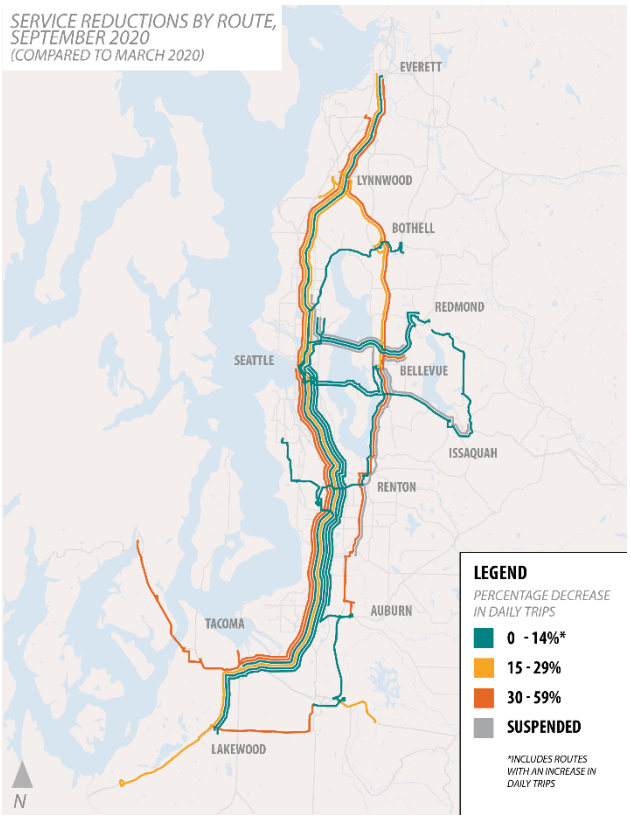
As our partner agencies changed their networks due to similar operating constraints, some ST Express routes began to serve stops that are normally bypassed along shared corridors. On Routes 522 (Woodinville-Seattle) and 550 (Bellevue-Seattle), ST Express buses began to serve local stops where suspended King County Metro services would previously stop. Similarly, local routes that ran parallel service with suspended ST Express services, such as King County Metro Route 271 (Issaquah-U District) for ST Express 555/556 (Issaquah-Northgate), maintained connections for passengers.

September 2020 Service Change

The September 2020 service change included some minor adjustment to the reduced schedule implemented earlier in the summer, with restoration of trips on routes that were experiencing high number of trips reaching social distancing capacity limits. In particular, trips were added to Routes 578 (Puyallup-Seattle) and 590 (Tacoma-Seattle) to accommodate returning ridership and to reduce the number of trips approaching capacity.

Link light rail service will operate at an 8 minute frequency during the peak periods, and 15 minutes during the off-peak, a significant increase in service compared to the 20 minute service that operated throughout the summer. Finally, a change in the Sounder service schedule changed which trains were operating. Although the span of service was changed, four more one-way trips were able to be added while minimizing the impacts on operating expenses, concentrating primarily in the peak direction and during the peak periods.





On-Going Monitoring

Predicting ridership changes, economic recovery, and available resources into 2021 and 2022 will be on-going challenge given the changing nature of the COVID-19 pandemic. Sound Transit will continue to be flexible on adjusting services as condition changes. Due to the social distancing capacity limits on buses, even a small increase in ridership without additional trips may cause issues with buses becoming full and not being able to pick up more passengers.

On-going monitoring of ridership since the beginning of the COVID-19 pandemic has allowed service planning to address the issues of overcrowded trips between service changes. For example, overcrowding on the first morning trips of Route 574 (Lakewood-SeaTac), frequently used by airport employees, lead to a decision to add “shadow buses,” which operate between regularly scheduled trips. In addition, tracking the number of at-capacity trips leaving Tacoma Dome Station on Route 590 in the early morning informed the decision to add five shadow trips before the September service change, with a total of eight additional trips being formalized as part of the September service change.

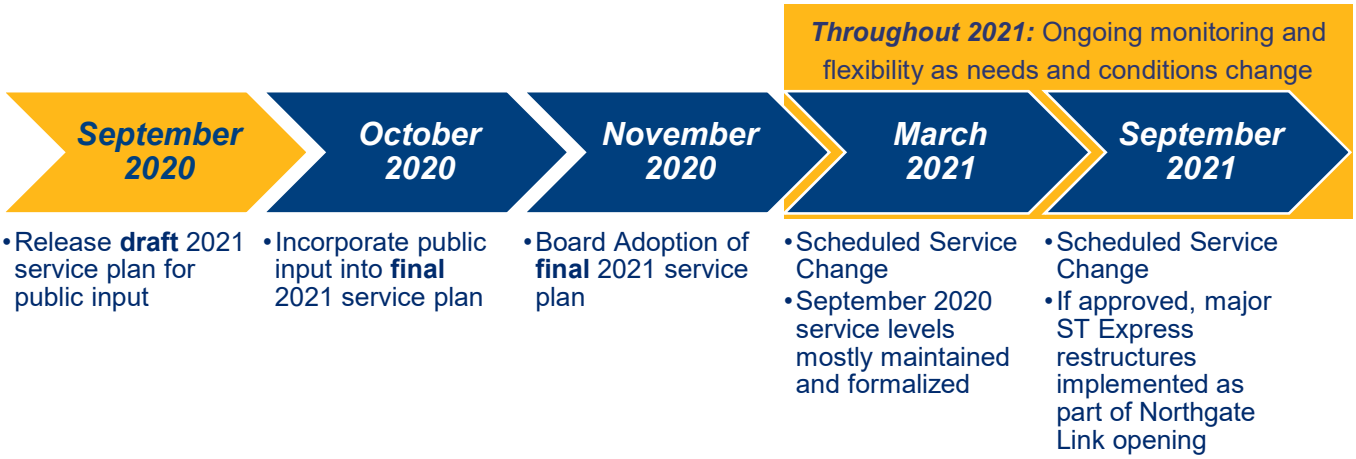
As the conditions continue to change, Sound Transit is prepared to continue to adjust service as the conditions change, using the same framework and decision making criteria established when implementing trip increases in summer and the September service change.

Draft 2021 Service Plan

2021 Service Planning and Outreach Process

Timeline

The 2021 Service Plan is proposed to be adopted by the Board of Directors in November 2020. Public input on this plan is being solicited in September 2020 such that staff can revise proposals based on feedback in time for Board adoption. If approved, service changes would occur alongside our partner agencies in March and September 2021. However, staff continue to monitor our system-wide performance and may make minor service changes which are not reflected here as needs and conditions change.


Throughout 2021: Ongoing monitoring and flexibility as needs and conditions change
September 2020
October 2020
November 2020
March 2021
September 2021
• Release **draft** 2021 service plan for public input
• Incorporate public input into **final** 2021 service plan
• Board Adoption of **final** 2021 service plan
• Scheduled Service Change
• September 2020 service levels mostly maintained and formalized
• Scheduled Service Change
• If approved, major ST Express restructures implemented as part of Northgate Link opening

Planning Context & Priorities

Background

Typically, Sound Transit seeks approval from the Board for major services changes as part of the annual Service Plan process. However, in spring 2020, when the COVID-19 pandemic led to precipitous ridership declines and staffing shortages, Sound Transit made emergency service reductions outside of its normal process, suspending some routes and reducing service on many others. The Federal Transit Administration allows for emergency changes to service for situations like this, but after one year, a formal Board action and public involvement process is required in order to continue those service levels. As we anticipate the impacts of the pandemic to continue into 2021, we are proposing a draft 2021 service plan that sustains current service levels past the original one-year grace period. This 2021 Service Plan seeks to formalize the changes through the typical Board approval process beginning with the next scheduled service change in March 2021.

What do we mean by suspended service?

Suspended service are routes still part of the ST network design, but not currently operating. When ridership in the corridor grows, we will review potential return of these suspended routes.

Suspending, rather than eliminating, a route leaves us the flexibility to restore it by keeping signage and other key infrastructure in place. By contrast, if we eliminate a route it means we do not have a goal to ever restore it.

Sustaining Essential 2020 Service and Responding to Ridership Recovery

Following steep ridership declines and emergency service reductions caused by the COVID-19 pandemic, some riders are beginning to return to transit and we are adding service back in response. We have prioritized our all-day, all-week travel markets, and have added service where it is needed to support equitable access, social distancing, and essential trips. In September 2020, we implemented a service change that restored some of the service that had been reduced in the spring.

It is our goal to continue to stably operate these levels of service through March of 2021, when we and other transit operators around the region make our next formal service changes.

Having stabilized our service levels and schedules for the time being, we are now turning our attention to what levels of service to run beyond March as we build our budget for 2021.

With our operating partners we are looking carefully at where our services are most needed and where we can anticipate increases in demand while prioritizing riders who depend on our transit service. We expect most changes to be neutral or an improvement compared to the emergency service levels implemented in March and April 2020.

2021 Plans will Evolve and Respond to Changing Conditions

Although ridership drops in March 2020 were steep and sudden, we anticipate a slow and incremental recovery. As many employers continue to offer employees flexible and remote work options and riders continue to limit nonessential travel, we expect ridership patterns throughout 2021 to remain fundamentally different than before the pandemic. Already we have seen demand shift away from corridors that historically had the highest ridership, towards corridors with more low-income populations and essential workers. Thus our service must be designed to respond to new patterns and new demands, in addition to reduced fare revenue from lower ridership overall.

As this pandemic and ensuing economic slowdown have been unprecedented, predicting ridership changes, economic recovery, and resource availability into 2021 and 2022 will be difficult. We will need to be flexible in order to respond to unpredictable conditions, such as passenger demand, heightened health and safety regulations, or financial impacts. We still do not know how social distancing needs may change or when major employers and schools will resume meeting in-person.

The Sound Transit Board will approve baseline service levels beginning in March 2021. After that, Sound Transit services are subject to the possibility of further increases or decreases based on changing circumstances. Changes may include additional service in response to increased demand or fare revenue, emergency reductions if the pandemic resurges, or more significant cost-saving measures. Many changes will be temporary, but major changes will still require Board approval and be implemented as part of the regular March and September biannual service changes.

We will consider restoring routes that are currently suspended if consistent ridership increases justify adding more service to increase passenger capacity. As ridership increases and if additional funding becomes available, then service suspensions that have resulted in a disparate impact or disproportionate burden will be considered first and given priority for restoration.

Sound Transit remains committed to working closely with its partners to continue serving the public. Efforts will continue to prioritize serving riders who depend on Sound Transit's services, including seniors, people with disabilities, Title VI protected populations (on the basis of race, color, national origin), low-income and Limited

English Proficiency populations. To the greatest extent possible, we will continue to run trains and buses at our earliest and latest normal weekday hours.

Balancing Service Growth with Need for Cost Containment

Prior to the pandemic, we knew that a key constraint in our 2021 service plan would be achieving $23 million in savings to offset costs from the new Northgate Link Extension and Link Operations and Maintenance Facility – East, which will help accommodate longer trains and more service with the opening of Northgate Link Extension. We have long planned to restructure some of our services when Northgate Link opens in September 2021, in order to better connect with Link and leverage the new service to save costs for bus operations.

Now, we face this constraint as well as reduced fare and tax revenue as a result of the pandemic. Consequently, we must work to contain our costs in 2021 and beyond while striving to restore service where demand is highest.

2021 Service Design

Between the pandemic recovery and the opening of Northgate Link Extension, Sound Transit services will experience different types of changes in 2021. Following are some overarching themes that drove service design.

All service changes listed below are draft proposals that may be refined based on public input during the September outreach phase. See the end of this section for a full list of draft service change proposals.

Focus on dependable and sustainable service

Passengers have expressed a need for service that is dependable, safe, clean, and avoids unexpected disruptions. To maintain a system that customers can count on, we will maintain service every 30 minutes or better on routes that operate all day and all week. We have administered surveys to understand how our riders receive information so we can keep everyone informed of changes when they do occur.

Prioritize Equity

Carefully considering the impacts of a proposed service change is an important part of service plan development. When proposing changes, we prioritize a network that is dependable all-day and all-week, with special focus on routes serving low-income and minority populations, as we know that many passengers who rely most on transit ride outside of peak commuting hours. The pandemic has highlighted the importance of essential workers, many of whom rely on transit.

The Title VI analysis, a requirement of the FTA, documents how changes implemented since February 2020 impact minority and low-income populations. Where we've identified disparate impacts and disproportionate burdens, we've considered alternatives for each change and explain why we think the change as proposed is justified and is the least discriminatory alternative. We always collect public input on major service changes as well. After reviewing public input we'll potentially adjust our proposal where we have flexibility and will then finalize the analysis prior to Board adoption.

Our goal is to protect equity in each step of the delivery of bus service through:

- Minimizing loss in geographic coverage and service span

- Maintaining the existing network to the extent possible, particularly routes that serve essential workers where teleworking is not an option.
- Focusing reductions on peak trips, so that off-peak headways are preserved
- Maintaining all-day, two-way routes
- Reducing commuter-oriented peak service where there is a local alternative, in order to reallocate resources to where they are most needed.

The next section provides a draft Title VI Service Equity evaluation of all proposed major changes to service in 2021.

Right-Size to Demand and Restore Service Where Possible

With commute ridership low, continue the suspension of rush hour services, including some rush hour trips and some entire peak-only routes. With a focus on maintaining all-day, all-week regional service in all travel markets, our proposed service design responds to changing regional travel patterns. At the same time, we are preparing to add service where it is needed the most when ridership increases and as resources become available.

Northgate Link Opening Drives Service Restructure

In September 2021, the 4.3 mile Northgate Link Extension will bring three new stations (Northgate, Roosevelt, U District) to Seattle and offer new connections to passengers around the region. Upon the opening of the extension, Link will resume operation of four-car trains and will continue headways implemented in September 2020 of 8 minutes during peak hours, 15 minutes off-peak and weekends, and 30 minutes in late evenings.

Sound Transit has been planning for the Northgate Link opening alongside our partners Community Transit and King County Metro for several years. Upon the opening of Northgate Link, we will re-route some ST Express routes to feed the expanded Link system at Northgate, Roosevelt, and U District Stations.

The opening presents an opportunity to reduce bus operating costs by terminating trips from Snohomish County at Northgate Station, while allowing customers to avoid traffic by transferring to Link.

Consider passenger and community input

Passenger and community input is a part of every annual Service Plan process. This year the public involvement process will help Sound Transit understand how recent changes have affected riders and whether proposed changes will meet their needs. Public input will be considered alongside ridership and demographic data to ensure that the proposed changes serve passengers to the greatest extent possible.

Public Input

Sound Transit is launching a public involvement process to get feedback on:

1. How the COVID-19 service reductions have impacted our passengers;
2. Whether the current system design is meeting their needs; and
3. The proposed ST Express route changes in connection with the planned September 2021 opening of Link service to Northgate.

What Changes Mean for Passengers

Frequency and Span Preserved on Key Regional Routes

Some peak-hour express routes, including Routes 541, 544, and 567, remain suspended. Suspending these routes, which had experienced steep ridership drops after March 2020, allows Sound Transit to re-invest those resources into other routes on those corridors to preserve the span and frequency on routes that riders depend on the most while providing travel alternatives to affected riders.

Longer Walks and Travel Times for Some Journeys

Passengers who ride routes that are currently suspended have other travel options, but they will likely result in longer travel times and walking distances to and from stops. In some cases, alternate travel options will involve transferring between two buses or trains and may include riding local transit services provided by partner agencies.

Longer Waits on Routes with Reduced Frequency

Though service on many routes has improved since emergency reductions were first implemented, riders returning to transit for the first time since the pandemic began will find that service levels are lower than they were pre-COVID-19. Riders may find that they have longer waits on most routes, and will need to adjust to new schedules.

Route Restructures Leverage New Options

Passengers on some routes will find that their journeys have fundamentally changed due to the opening of Northgate Link. In order to leverage this new service and avoid duplicative service, some routes that previously traveled on the I-5 corridor north of Seattle will terminate at a new Link station to connect to Link. Passengers will need to transfer to continue their journeys.

Summary of Draft Proposed Changes

The response to the impacts of the pandemic drives one of the most significant changes to the Sound Transit network of rail and express bus services. The next three pages list proposed service levels and changes to routing for both the March 2021 and September 2021 service changes. Proposed service changes, such as moving a stop more than half a mile, closing a stop without alternative service within half a mile, or changing a route's service hours by more than 25 percent, all require a Title VI Service Equity Analysis and Sound Transit Board approval.

Provide Your Input

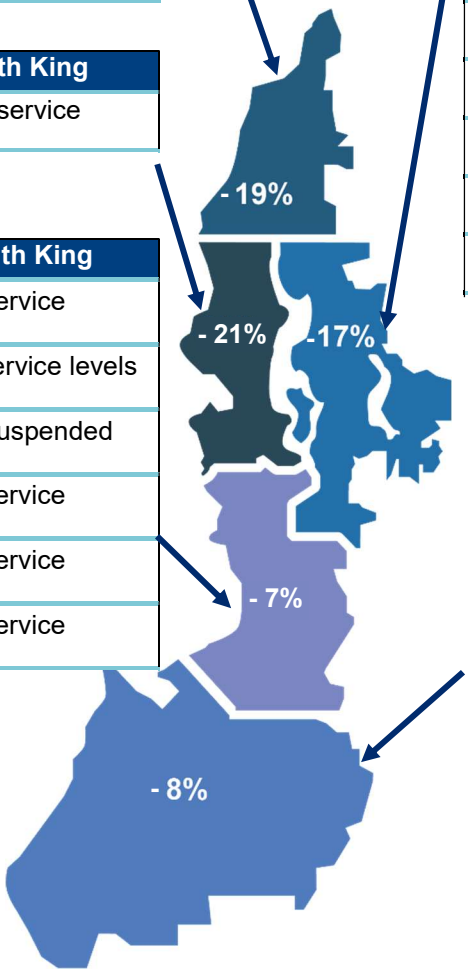
After you've learned about the 2021 Service Plan, please take our survey to weigh in. We'll use your feedback to shape the final proposal that we'll present to the Sound Transit Board before the end of the year.

These are tough decisions, and we need your input. Your survey responses will help us understand changing travel patterns so we can adjust service to where you need it most.

Proposed Changes for Snohomish	
510	Continue reduced service levels
511	Continue reduced service levels
512	Maintain full service
513	Continue reduced service levels
522	Continue reduced service levels
532	Continue reduced service levels
535	Continue reduced service levels

Proposed Changes for North King	
Link	Restore partial service

Proposed Changes for South King	
560	Maintain full service
566	Continue reduced service levels
567	Service remains suspended
574	Maintain full service
577	Maintain full service
578	Maintain full service



Proposed Changes for East King	
522	Continue reduced service levels
532	Continue reduced service levels
535	Continue reduced service levels
541	Service remains suspended
542	Continue reduced service levels
544	Service remains suspended
545	Continue reduced service levels
550	Continue reduced service levels
554	Maintain full service
555	Service remains suspended.
556	Service remains suspended
560	Maintain full service

Proposed Changes for Pierce County	
574	Maintain full service
578	Maintain full service
580	Continue reduced service levels
586	Continue reduced service levels
590	Restore some trips to address loads
592	Continue reduced service levels
594	Maintain full service
595	Continue reduced service levels
596	Continue reduced service levels

*Figure 1: Weekday Trip Reductions proposed **in March 2021**, compared to **March 2020** baseline*

Route	March 2021-September 2021 Proposed Changes	September 2021-March 2022 Service Changes	Requires Service Equity Analysis & Board Approval
510	Continue reduced service levels from 42 to 30 daily trips.	Add stop at Mountlake Terrace Freeway Station, no change in service levels.	**Yes**
511	Continue reduced service levels from 38 to 28 daily trips.	Re-route to Northgate Link Station, coordinate schedule with Route 513.	**Yes**
512	Maintain full service.	Re-route to Northgate Station and discontinue stop at NE 145th St.; no change in service levels.	**Yes**
513	Continue reduced service levels from 20 to 12 daily trips.	Re-route to Northgate Link Station, add stops at Lynnwood Transit Center and Ash Way Park-and-Ride, increase service levels.	**Yes**
522	Continue reduced service levels from 109 to 98 daily trips.	Re-route to Roosevelt Station. Route operates 15 minutes all day, including weekends.	**Yes**
532	Continue reduced service levels from 41 to 20 daily trips.	Continue reduced service levels from 41 to 20 daily trips.	**Yes**
535	Continue reduced service levels from 65 to 46 daily trips.	Continue reduced service levels from 65 to 46 daily trips.	**Yes**
541	Continue service suspension.	Continue service suspension.	**Yes**
542	Continue reduced service levels from 90 to 81 daily trips.	Continue reduced service levels from 90 to 81 daily trips. Re-route to U District Station, route operates between Redmond and U District only.	**Yes**
544	Continue service suspension.	Continue service suspension.	**Yes**
545	Continue reduced service levels from 185 to 163 daily trips.	Continue reduced service levels from 185 to 163 daily trips.	No
550	Continue reduced service levels from 181 to 167 daily trips.	Continue reduced service levels from 181 to 167 daily trips.	No
554	Maintain full service.	Maintain full service.	No
555	Continue service suspension.	Restore service. Route would operate between Bellevue and the U District Link station.	**Yes**
556	Continue service suspension.	Route would operate between Issaquah and the U District Link station.	**Yes**
560	Maintain full service.	Maintain full service.	No
566	Continue reduced service levels from 54 to 38 daily trips.	Continue reduced service levels from 54 to 38 daily trips.	No

567	Continue service suspension.	Continue service suspension.	**Yes**
574	Maintain full service.	Maintain full service.	No
577	Continue full service with schedule adjustment to coordinate with Route 578.	Continue full service with schedule adjustment to coordinate with Route 578.	No
578	Continue increased service levels from 55 to 62 daily trips, including additional southbound service during afternoon rush hour.	Continue increased service levels from 55 to 62 daily trips, including additional southbound service during afternoon rush hour.	No
580	Continue reduced service levels from 23 to 20 daily trips.	Continue reduced service levels from 23 to 20 daily trips.	No
586	Continue reduced service levels from 16 to 14 daily trips.	Discontinue route with Link extension to Northgate. Shift some saved resources to Route 590 to provide additional trips.	**Yes**
590	Adjust reduced service levels from 76 to 70 daily trips. Supplement with 6 trips service Tacoma Dome to Seattle on Route 595.	Continue reduced service levels at 70 daily trips. Supplement with 6 trips service Tacoma Dome to Seattle on Route 595.	No
592	Continue reduced service levels from 31 to 24 daily trips.	Continue reduced service levels from 31 to 24 daily trips.	**Yes**
594	Maintain full service.	Maintain full service.	No
595	Continue reduced service levels from 10 to 6 daily trips. Add new stop at Tacoma Dome Station.	Continue reduced service levels from 10 to 6 daily trips. Continue stop at Tacoma Dome Station added in March 2021.	**Yes**
596	Continue reduced service levels from 19 to 16 daily trips.	Continue reduced service levels from 19 to 16 daily trips.	No
Link	On weekdays, trains operate every 8 minutes during the morning and afternoon rush hours, every 15 minutes during the early morning, midday and early evening, and every 30 minutes late at night. On weekends, service operates every 15 minutes during the day and every 30 minutes late night.	Service to Northgate begins, continue service frequencies from March 2021, increase train length from three-car to four-car trains.	**Yes**
Sounder North	Continue reduced service levels from 8 to 4 daily trips.	Continue reduced service levels from 8 to 4 daily trips.	**Yes**
Sounder South	Continue reduced service levels from 26 to 18 daily trips focused on rush hour commute, reduce the number of midday trips.	Continue reduced service levels from 26 to 18 daily trips focused on rush hour commute, reduce the number of midday trips.	**Yes**
Tacoma Link	Maintain full service.	Maintain full service.	No

Draft Title VI Analysis

Introduction

As part of the annual Service Plan, Sound Transit conducts a service equity analysis on each proposed Major Service Change, also known as a Title VI evaluation analysis, to ensure that changes to transit service are consistent with Title VI policies defined by the Federal Transit Administration (FTA) and Board policies defined by the Sound Transit Board of Directors. The FTA is responsible for ensuring that federally supported transit services and related benefits are distributed by applicants and recipients of FTA assistance in a manner consistent with Title VI, Section 601 of the Civil Rights Act of 1964, which states:

> *No person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.*

This section provides an initial assessment of potential impacts to minority, low income and limited English-speaking communities associated with the proposed Major Service changes. This draft analysis is a work in progress and will continue as part of the process of finalizing the proposed service plan following public outreach in September 2020.

Major Service Change

Resolution R2013-18, adopted by the Sound Transit Board of Directors in 2013, established policies for conducting equity analyses of major service changes and assessing the impacts on minority and low-income populations. This policy defines a major service change as follows:

- A major service change is any single change in service on an individual bus or rail route that would add or eliminate more than 25 percent of the route's weekly platform service hours,
- Move the location of a stop or station by more than a half mile.
- Closing or removing a stop or station without replacement within a half mile.

Adverse Effects

The adopted Sound Transit major service change policy, described above, also defines potential adverse effects of major service changes and thresholds for determining whether the proposed service change would have a disparate impact on minority populations and/or a disproportionate burden on low-income populations. The definitions are as follows:

- A potential **adverse effect** is defined as a geographical or time-based addition or reduction in service which includes but is not limited to: changes to span of service, changes to frequency of service, or elimination of routes or route segments.
- A **disparate impact** occurs when the minority percentage of the population adversely affected by a major service change is greater than the average minority percentage of the population of Sound Transit's service area.
- A **disproportionate burden** occurs when the low-income percentage of the population adversely affected by a major service change is greater than the average low-income percentage of the population of Sound Transit's service area.

Per Sound Transit's policy, if any disparate impact or disproportionate burden is found during the service equity analysis, Sound Transit will consider steps to avoid, minimize, or mitigate the adverse impacts and reanalyze the modified changes to determine if the impacts are removed or lessened.

Overview of Initial Analysis Results

In developing service plans for 2021, two distinct groups of service changes are proposed, each requiring a full Title VI analysis of the adverse impacts on minority and low-income populations. The first group of changes proposes continuing temporary COVID-19 service changes and reductions indefinitely. The second group of proposed changes considers how to restructure ST Express and Link service when the Northgate Link light rail extension opens in fall 2021 providing the region with three new stations in north Seattle (U District, Roosevelt and Northgate).

Given the scale of service changes and reductions, many routes serving minority and low-income populations are impacted. This analysis, in coordination with public outreach will guide the next steps for planning the final proposed 2021 service plan. The following table summarizes all major service changes evaluated for disparate impacts and/or disproportionate burdens. **Additional evaluation of the impacts, benefits, and reasoning for the proposed service changes can be found in the route-by-route service change section of this document.**

Draft Fare Equity Analysis

Routes 512 & 513 Re-Route to Northgate Station

- ORCA
    - No fare difference via ST Express or Link
    - Riders choosing to transfer to Community Transit Commuter Express service at the Mountlake Terrace Freeway Station would pay additional fare, with the amount dependent upon the rider category.
- Adult cash fare to downtown Seattle
    - Current fare = $3.25
    - $3.25+$2.75 if transferring with Link
    - $3.25+$3.25 if transferring with ST Express
    - $3.25+$4.25 if transferring with Community Transit at Mountlake Terrace Freeway Station

The Fare Equity Analysis determined these changes would result in no disparate or disproportionate impacts.

Route 586 Elimination

Over 85% of customers on Route 586 used either the UW U-Pass or an ORCA Business Passport that allows unlimited travel on any mode at any fare. These customers would not experience a fare change as the result of this service change. Of the remaining 15 percent:

- Customers who use ORCA and choose to ride Route 590/594 and transfer to Link will also see no change in fares;
- ORCA customers who choose to ride Sounder and transfer to Link will pay a higher Sounder fare.
- Cash riders on Route 586 will pay a higher fare to transfer from either Sounder or Route 590/594 to Link.

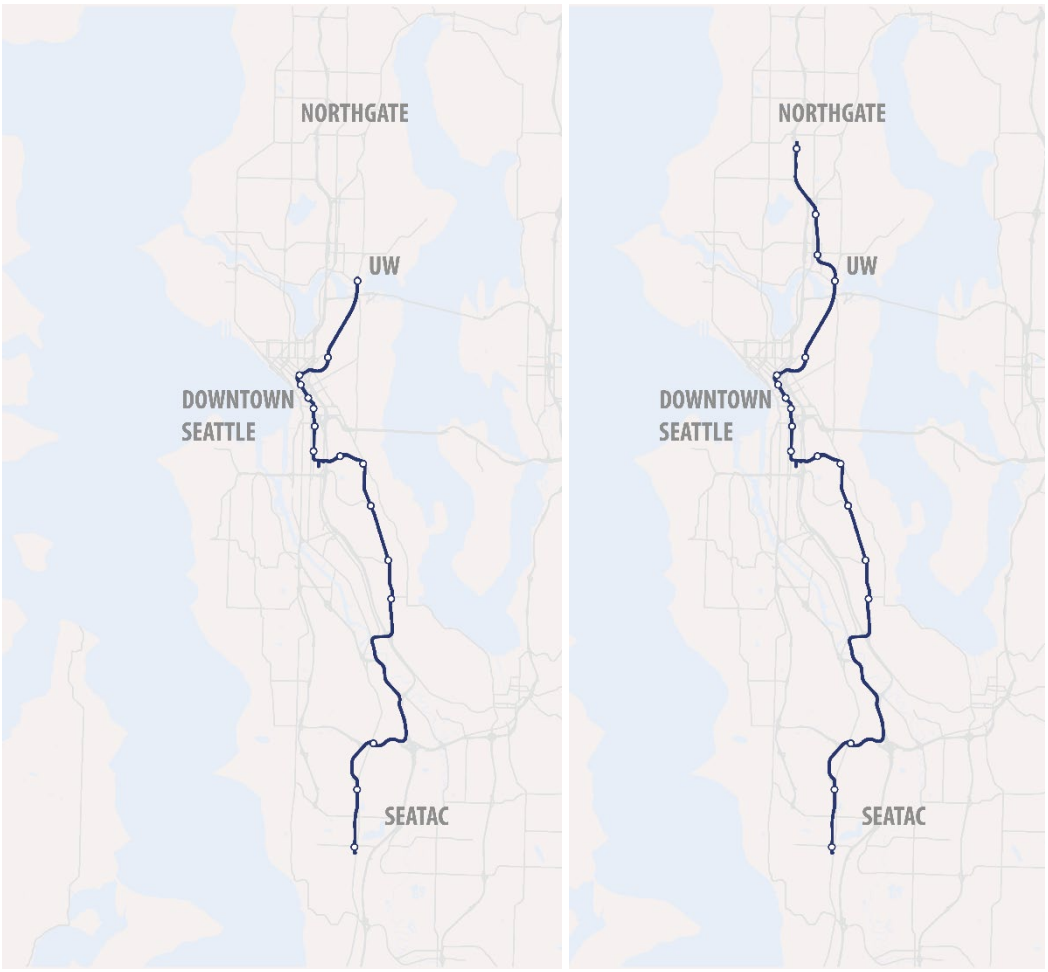
Route	Proposed Service Change Evaluated	Disparate Impact	Disproportionate Burden	Reasoning for Draft Proposal
Changes Requiring Title VI Service Equity Analysis & Board Approval				
510	March 2021: Continue reduced service levels from 42 to 30 daily trips. September 2021: Add stop at Mountlake Terrace Freeway Station, no change in service levels	No	Yes	Reduced rush hour demand. Adding the stop allows passengers to transfer between I-5 North routes to choose between a bus-trip or bus-Link trip to downtown Seattle.
511	March 2021: Continue reduced service levels from 38 to 28 daily trips. September 2021: Re-route to Northgate Link Station, coordinate schedule with Route 513.	No	No	*No disparate impact of disproportionate burden*
512	March 2021: Maintain full service. September 2021: Re-route to Northgate Station and discontinue stop at 145th St.	No	Yes	Provides access to all Link stations, more reliable travel time during rush hour.
513	March 2021: Continue reduced service levels from 20 to 12 daily trips. September 2021: Re-route to Northgate Link Station, add stops at Lynnwood Transit Center and Ash Way Park-and-Ride, increase service levels.	No	Yes	Provides access to all Link stations, more reliable travel time during rush hour.
522	March 2021: Continue reduced service levels from 109 to 98 daily trips. September 2021: Re-route to Roosevelt Station, operate every 15 minutes all-day, including weekends.	No	No	*No disparate impact of disproportionate burden*
532	Continue reduced service levels from 41 to 20 daily trips.	No	No	*No disparate impact of disproportionate burden*
535	Continue reduced service levels from 65 to 46 daily trips.	No	No	*No disparate impact of disproportionate burden*
541	Continue service suspension.	Yes	No	Reduced rush hour demand. Route 542 available as alternative.
542	March 2021: Continue reduced service levels from 90 to 81 daily trips. September 2021: Re-route to U District Station, route operates between Redmond and U District only.	No	No	*No disparate impact of disproportionate burden*
544	Continue service suspension.	Yes	No	Reduced rush hour demand; all-day Route 545 available as alternative.
555	March 2021: Continue service suspension. September 2021: Restore service. Route would operate between Bellevue and the U District Link station.	No	No	*No disparate impact of disproportionate burden*
556	March 2021: Continue service suspension. September 2021: Route would operate between Issaquah and the U District Link station.	No	No	*No disparate impact of disproportionate burden*
567	Continue service suspension.	Yes	Yes	Reduced rush hour demand.
586	March 2021: Continue reduced service levels from 16 to 14 daily trips. September 2021: Discontinue route with Link extension to Northgate. Shift some saved resources to Route 590 to provide additional trips.	Yes	Yes	Link will cover areas served by Route 586, riders accessing UWS and points north can use Routes 590, 594 or Sounder and transfer to Link Increased reliability by transferring to Link.
592	Continue reduced service levels from 31 to 24 daily trips.	Yes	Yes	Reduced rush hour demand.
595	Continue reduced service levels from 10 to 6 daily trips. Add new stop at Tacoma Dome Station.	No	Yes	Provides more capacity for passengers at Tacoma Dome Station.

Route	Proposed Service Change Evaluated	Disparate Impact	Disproportionate Burden	Reasoning for Draft Proposal
Changes Requiring Title VI Service Equity Analysis & Board Approval				
Link	March 2021: On weekdays, trains operate every 8 minutes during the morning and afternoon rush hours, every 15 minutes during the early morning, midday and early evening, and every 30 minutes late at night. On weekends, service operates every 15 minutes during the day and every 30 minutes late night. September 2021: Service to Northgate begins, continue service frequencies from March 2021, increase train length from three-car to four-car trains.	Yes	Yes	Reduced rush hour demand.
Sounder North	Continue reduced service levels from 8 to 4 daily trips.	No	Yes	Low ridership during these trips Alternative ST Express trips available during these times.
Sounder South	Continue reduced service levels from 26 to 18 daily trips focused on rush hour commute, reduce the number of midday trips.	Yes	Yes	Low ridership during these trips Alternative ST Express trips available during these times.
Administrative Changes do not require a full Title VI equity analysis or Board Approval				
545	Continue reduced service levels from 185 to 163 daily trips.	n/a	n/a	
550	Continue reduced service levels from 181 to 167 daily trips.	n/a	n/a	
554	Maintain full service.	n/a	n/a	
560	Maintain full service.	n/a	n/a	
566	Continue reduced service levels from 54 to 38 daily trips.	n/a	n/a	
574	Maintain full service.	n/a	n/a	
577	Continue full service with schedule adjustment to coordinate with Route 578.	n/a	n/a	
578	Continue increased service levels from 55 to 62 daily trips, including additional southbound service during afternoon rush hour.	n/a	n/a	
580	Continue reduced service levels from 23 to 20 daily trips.	n/a	n/a	
590	Continue reduced service levels from 76 to 61 daily trips. Supplement with 6 trips service Tacoma Dome to Seattle on Route 595.	n/a	n/a	
594	Maintain full service.	n/a	n/a	
596	Continue reduced service levels from 19 to 16 daily trips.	n/a	n/a	
Tacoma Link	Maintain full service.	n/a	n/a	

Link light rail *Angle Lake – Northgate*

Current Route Map

Proposed (September 2021)



Link light rail: Angle Lake – Northgate

Proposed Service Changes

- **September 2020*:*** On weekdays, three-car trains operate every 8 minutes during the morning and afternoon rush hours, every 15 minutes during the early morning, midday and early evening, and every 30 minutes evenings after 10 p.m. On weekends, service operates every 15 minutes during the day and every 30 minutes late evenings after 10 p.m.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Service to Northgate begins, using the same frequencies implemented in September 2020, but with four-car trains instead of three-car trains.

	Time of Day	March 2020	September 2020	March 2021 Proposal	September 2021 Proposal
	Early AM	12 min.	15 min.	15 min.	15 min.
How often do trains run on Weekdays?	AM Rush	6 min.	8 min.	8 min.	8 min.
	Midday	10 min.	15 min.	15 min.	15 min.
	PM Rush	6 min.	8 min.	8 min.	8 min.
	Evening	10 min.	15 min.	15 min.	15 min.
	Late evening	15 min.	30 min.	30 min.	30 min.
How often do trains run on Saturdays?	All day	10 min.	15 min.	15 min.	15 min.
How often do trains run on Sundays?	All day	10 min.	15 min.	15 min.	15 min.

Why are we proposing these changes?

In September 2020, service adjustments were necessary to preserve access throughout our service area and conserve resources as a result of the COVID-19 pandemic.

What does this mean for riders?

Benefits

- Opening Northgate Link will bring light rail service to three new stations in North Seattle: U District, Roosevelt and Northgate. At Northgate, connections would be available to ST Express buses serving Snohomish County. Connections to communities along SR-522 out to Woodinville would be available at Roosevelt station.
- Four-car trains will add capacity to Link.

Tradeoffs

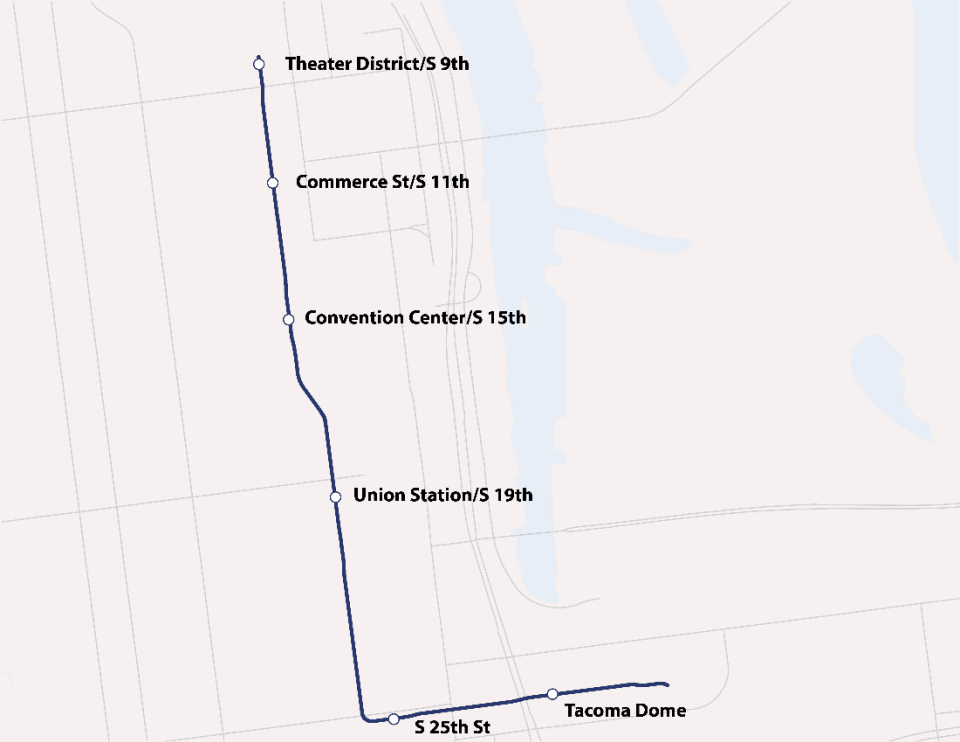
- Service will be less frequent.

Draft Title VI evaluation

- **Disparate impact** - the proposed change impacts an area with a minority population of **54.8%**, higher than the Sound Transit District average of **39.7%.**
- **Disproportionate burden** - the proposed change impacts an area with a low-income population of **23.0%**, higher than the Sound Transit District average of **16.4%.**
- Due to the determination of both a disparate impact and disproportionate burden, results from public input and a review of alternatives will help shape the final proposal.

Tacoma Link *Theater District – Tacoma Dome Station*

Current and Proposed Route Map



Tacoma Link: Theater District – Tacoma Dome Station

Proposed Service Changes

- **September 2020*:*** Service continues to operate on weekdays and Saturdays every 12 minutes throughout the day and 24 minutes in the early morning and late evenings as well as all-day Sunday (no change).
- **March 2021 *Proposal*:** Maintain existing service levels (no change).
- **September 2021 *Proposal*:** Maintain existing service levels (no change).

	Time of Day	March 2020	September 2020	2021 Proposal
	Early AM	24 min.	24 min.	24 min.
How often do trains run on Weekdays?	AM Rush	12 min.	12 min.	12 min.
	Midday	12 min.	12 min.	12 min.
	PM Rush	12 min.	12 min.	12 min.
	Evening	24 min.	24 min.	24 min.
How often do trains run on Saturdays?	All day	12 min.	12 min.	12 min.
How often do trains run on Sundays?	All day	24 min.	24 min.	24 min.

Why are we proposing no changes?

No changes are proposed for Tacoma Link until 2022 when the Hilltop Tacoma Link Extension opens.

What does this mean for riders?

Service would continue to operate without changes.

Sounder North *Everett – Seattle*

Current and Proposed Route Map

Sounder North *(Rush hour only)*: Everett – Seattle

Proposed Service Changes

- **September 2020*:*** Daily weekday trips reduced from 8 to 4.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Maintain September 2020 service levels.

Southbound

Train	Everett	Mukilteo	Edmonds	Seattle	2021 Proposed
~~1701~~	~~5:45 a.m.~~	~~5:56~~	~~6:11~~	~~6:44~~	Continue suspension
1703	6:15 a.m.	6:26	6:41	7:14	
~~1705~~	~~6:45 a.m.~~	~~6:56~~	~~7:11~~	~~7:44~~	Continue suspension
1707	7:15 a.m.	7:26	7:41	8:14	

Northbound

Train	Seattle	Edmonds	Mukilteo	Everett	2021 Proposed
~~1700~~	~~4:05 p.m.~~	~~4:32~~	~~4:47~~	~~5:04~~	Continue suspension
1702	4:33 p.m.	5:00	5:15	5:32	
~~1704~~	~~5:05 p.m.~~	~~5:32~~	~~5:47~~	~~6:04~~	Continue suspension
1706	5:35 p.m.	6:02	6:17	6:34	

Why are we proposing these changes?

Ridership patterns since March have been consistently low. Continuing the suspension of four weekday daily trains would conserve resources while also maintaining some service on the route.

What does this mean for riders?

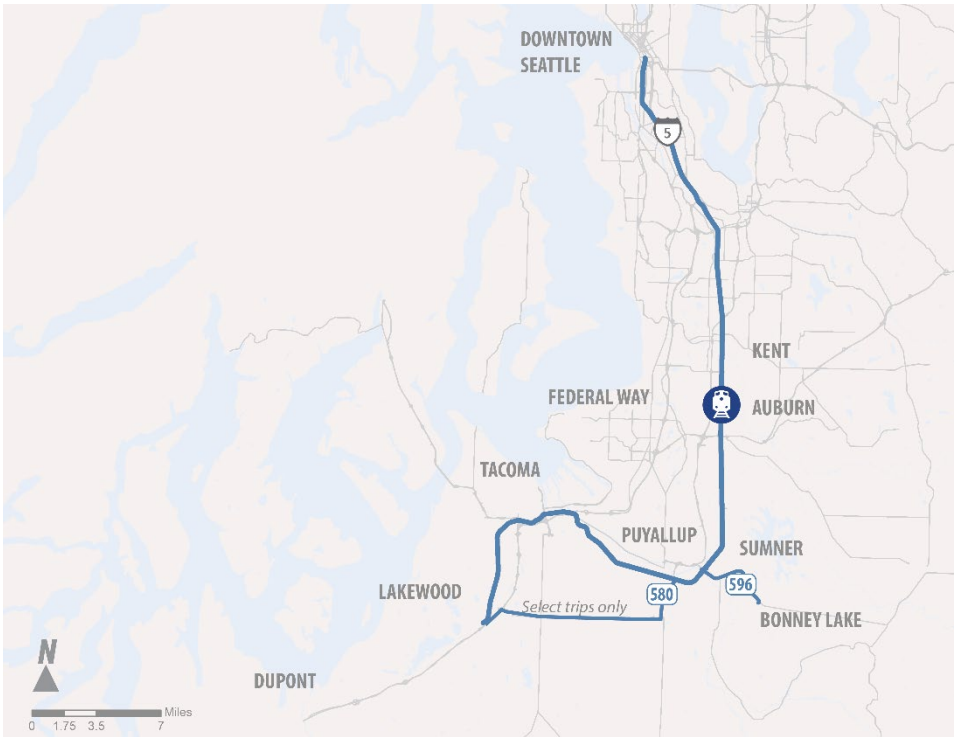
Passengers would have limited departures to choose from.

Draft Title VI evaluation

- **No disparate impact** - the proposed change impacts an area with a minority population of **35.0%**, lower than the Sound Transit District average of **39.7%.**
- **Disproportionate burden** - the proposed change impacts an area with a low-income population of **17.5%**, higher than the Sound Transit District average of **16.4%.**
- Due to the determination disproportionate burden, results from public input and a review of alternatives will help shape the final proposal.

Sounder South *Lakewood – Tacoma – Seattle*

Current and Proposed Route Map



Sounder South: Lakewood – Tacoma – Seattle

Proposed Service Changes

- **September 2020*:*** Daily weekday trips reduced from 26 to 14 in spring 2020. In September 2020, service increased to 18 daily trips, but reduced the number off-peak trips.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Maintain September 2020 service levels.

Northbound Schedule (September 2020 and proposed for 2021)

Train	Lakewood	South Tacoma	Tacoma Dome	Puyallup	Sumner	Auburn	Kent	Tukwila	Seattle	2021 Proposed
1500	4:36 a.m.	4:41	4:50	5:03	5:08	5:18	5:25	5:32	5:52	
1502	5:01 a.m.	5:06	5:15	5:28	5:33	5:43	5:50	5:57	6:17	
1504	5:26 a.m.	5:31	5:40	5:53	5:58	6:08	6:15	6:22	6:42	
1506	5:46 a.m.	5:51	6:00	6:13	6:18	6:28	6:35	6:42	7:02	
1508	6:06 a.m.	6:11	6:20	6:33	6:38	6:48	6:55	7:02	7:22	
1510	6:26 a.m.	6:31	6:40	6:53	6:58	7:08	7:15	7:22	7:42	
1512	6:46 a.m.	6:51	7:00	7:13	7:18	7:28	7:35	7:42	8:02	
~~**1514**~~	~~-~~	~~-~~	~~7:20am~~	~~7:33~~	~~7:38~~	~~7:48~~	~~7:55~~	~~8:02~~	~~8:22~~	Continue suspension
1516	-	-	7:50am	8:03	8:08	8:18	8:25	8:32	8:52	
~~**1518**~~	~~10:16 a.m.~~	~~10:21~~	~~10:30~~	~~10:43~~	~~10:48~~	~~10:58~~	~~11:05~~	~~11:12~~	~~11:32~~	Continue suspension
~~**1520**~~	~~-~~	~~-~~	~~4:06 p.m.~~	~~4:18~~	~~4:23~~	~~4:33~~	~~4:40~~	~~4:47~~	~~4:07~~	Continue suspension
~~**1522**~~	~~-~~	~~-~~	~~4:30 p.m.~~	~~4:42~~	~~4:47~~	~~4:57~~	~~5:04~~	~~5:11~~	~~5:31~~	Continue suspension
1524	-	-	5:15 p.m.	5:27	5:32	5:42	5:49	5:56	5:16	

Southbound (September 2020 and proposed for 2021)

Train	Seattle	Tukwila	Kent	Auburn	Sumner	Puyallup	Tacoma	South Tacoma	Lakewood	2021 Proposed
~~1501~~	~~6:05 a.m.~~	~~6:18~~	~~6:25~~	~~6:32~~	~~6:42~~	~~6:47~~	~~7:06~~	~~-~~	~~-~~	Continue suspension
1503	6:35 a.m.	6:48	6:55	7:02	7:12	7:17	7:36	-	-	
~~1505~~	~~7:55 a.m.~~	~~8:08~~	~~8:15~~	~~8:22~~	~~8:32~~	~~8:37~~	~~8:52~~	~~9:01~~	~~9:11~~	Continue suspension
~~1507~~	~~2:35 p.m.~~	~~2:48~~	~~2:55~~	~~3:02~~	~~3:12~~	~~3:17~~	~~3:37~~	~~-~~	~~-~~	Continue suspension
~~1509~~	~~3:15 p.m.~~	~~3:28~~	~~3:35~~	~~3:42~~	~~3:52~~	~~3:57~~	~~4:17~~	~~-~~	~~-~~	Continue suspension
1511	3:35 p.m.	3:48	3:55	4:02	4:12	4:17	4:30	4:39	4:51	
1513	3:55 p.m.	4:08	4:15	4:22	4:32	4:37	4:57	-	-	
1515	4:15 p.m.	4:28	4:35	4:42	4:52	4:57	5:10	5:19	5:31	
1517	4:35 p.m.	4:48	4:55	5:02	5:12	5:17	5:30	5:39	5:51	
1519	4:55 p.m.	5:08	5:15	5:22	5:32	5:37	5:50	5:59	6:11	
1521	5:20 p.m.	5:33	5:40	5:47	5:57	6:02	6:15	6:24	6:36	
1523	5:45 p.m.	5:58	6:05	6:12	6:22	6:27	6:40	6:49	7:01	
1525	6:30 p.m.	6:43	6:50	6:57	7:07	7:12	7:25	7:34	7:46	

Why are we proposing these changes?

- In response to the COVID-19 pandemic, we reduced Sounder South service in spring 2020 to 14 daily weekday trips. In September, we shifted the trips operating to allow for an additional four daily weekday trips to operate accommodating rebounding ridership.
- Service on ST Express Route 578 (Seattle-Puyallup) increased to operate throughout the afternoon in the southbound direction in order to continue coverage during times that Sounder South is not operating.
- In addition, we restored additional trips on Route 590 (Seattle-Tacoma) in September 2020, primarily in the early morning, and these would operate at higher levels in March 2021.

What does this mean for riders?

Benefits

- More total daily trips.

Tradeoffs

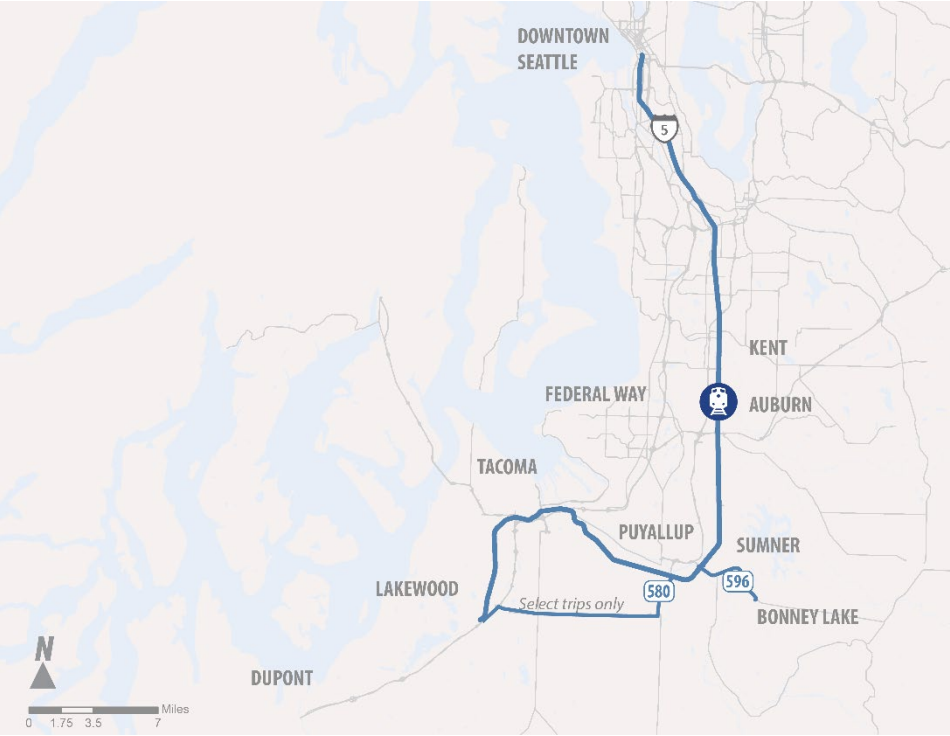
- Passengers that traveled during midday, early afternoon, or in the reverse-peak direction (southbound in the morning, northbound in the afternoon) would need to use alternate routes or a different trip.

Draft Title VI evaluation

- **Disparate impact** - the proposed change impacts an area with a minority population of **46.0%**, higher than the Sound Transit District average of **39.7%.**
- **Disproportionate burden** - the proposed change impacts an area with a low-income population of **21.0%**, higher than the Sound Transit District average of **16.4%.**
- Due to the determination of both a disparate impact and disproportionate burden, results from public input and a review of alternatives will help shape the final proposal.

Routes 580/596 *Pierce County (Sounder Connectors)*

Current and Proposed Route Map



Route 580 *(Rush hour only)*: Lakewood/South Hill – Puyallup

Proposed Service Changes

- **September 2020*:*** Daily weekday trips were reduced from 23 to 20.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Maintain September 2020 service levels.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	30 min.	30 min.	30 min.
	AM Rush	20 min.	20 min.	20 min.
	PM Rush	20 min.	20 min.	20 min.

Route 596 *(Rush hour only)*: Bonney Lake – Sumner

Proposed Service Changes

- **September 2020*:*** Daily weekday trips were reduced from 19 to 16.
- **March 2021 *Proposal*:** Maintain September 2020 increased service levels.
- **September 2021 *Proposal*:** Maintain September 2020 increased service levels.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	30 min.	30 min.	30 min.
	AM Rush	20 min.	20 min.	20 min.
	PM Rush	20 min.	20 min.	20 min.

Why are we proposing these changes?

- Sounder would be operating 18 daily weekday trips. Schedules on Routes 580 and Route 596 would be adjusted so that buses would continue to meet peak-direction Sounder trips.

What does this mean for riders?

Benefits

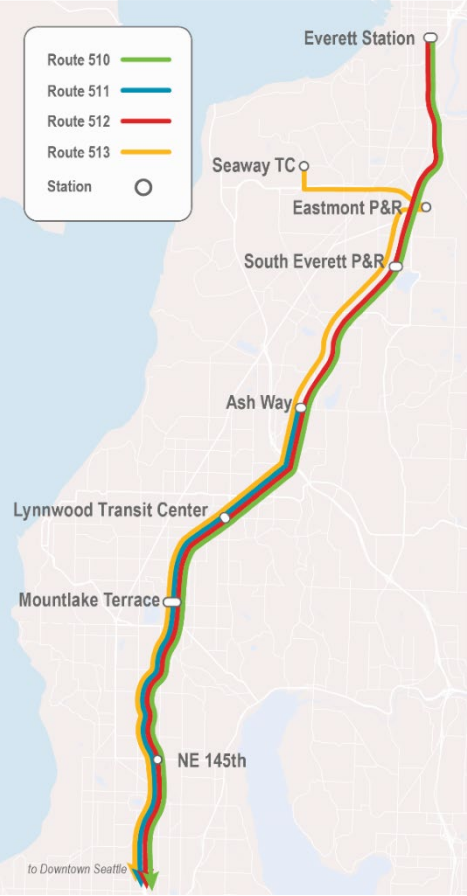
- Route 580 and Route 596 trips would continue to be coordinated with Sounder schedule so that all peak-direction trains (northbound in the morning, southbound in the afternoon) are met.

Tradeoffs

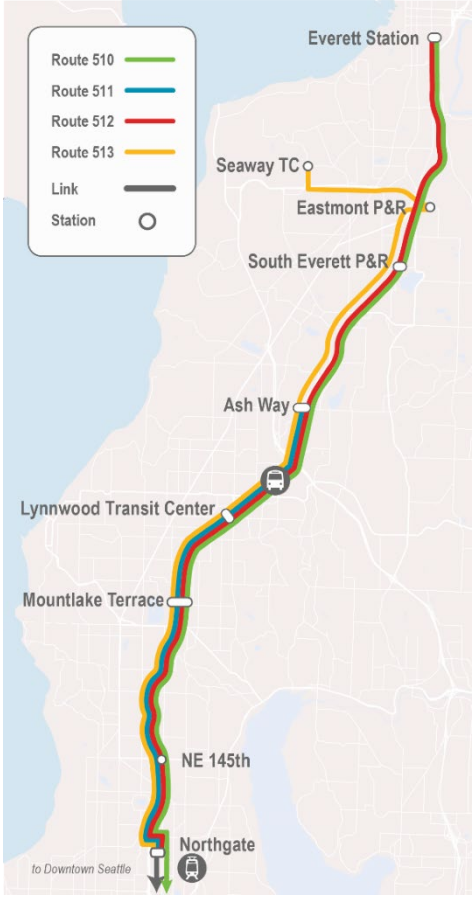
- Passengers would have fewer Sounder trips to choose from.

Routes 510/511/512/513 *Snohomish County – Seattle*

Current Route Map



Proposed (September 2021)



Route 510 *(Rush hour only)*: Everett – Seattle

Proposed Service Changes

- **September 2020*:*** Daily trips reduced from 42 to 30.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Add a stop at Mountlake Terrace Freeway Station.

	Time of day	March 2020	September 2020	2021 Proposal
How often do buses run on weekdays?	Early AM	20 min.	20 min.	20 min.
	AM rush	10 min.	10-30 min.	10-30 min.
	PM rush	12 min.	12 min.	12 min.

Route 511 *(Rush hour only)*: Ash Way – Seattle

Proposed Service Changes

- **September 2020:** Daily trips reduced from 38 to 28.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Truncate at Northgate Link Station. Increase service levels.

	Time of day	March 2020	September 2020	March 2021 Proposal	September 2021 Proposal
How often do buses run on weekdays?	Early AM	20 min.	40 min.	40 min.	20 min.
	AM Rush	15 min.	20-30 min.	20-30 min.	15 min.
	PM Rush	15 min.	15 min.	15 min.	15 min.

Route 512: Everett – Seattle

Proposed Service Changes

- **September 2020:** Restore to full schedule of 107 daily weekday trips.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal:*** Truncate at Northgate Station and discontinue stop at N 145th St. Maintain September 2020 service levels.

	Time of day	March 2020	September 2020	2021 Proposal
How often do buses run on weekdays?	Early AM/AM rush	15 min.	15 min.	15 min.
	Midday/PM rush/evening	15 min.	15 min.	15 min.
	Late evening	30 min.	30 min.	30 min.
How often do buses run on Saturdays?	All day	15 min.	15 min.	15 min.
How often do buses run on Sundays?	All day	30 min.	30 min.	30 min.

Route 513 *(Rush hour only)*: Seaway Transit Center – Seattle

Proposed Service Changes

- **September 2020:** Daily trips reduced from 20 to 12.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal:*** Truncate at Northgate Link Station and add stops at Lynnwood Transit Center and Ash Way Park-and-Ride. Increase service levels.

	Time of Day	March 2020	September 2020	March 2021 Proposal	September 2021 Proposal
How often do buses run on weekdays?	Early AM	30 min.	60 min.	60 min.	15 min.
	AM rush	15 min.	30 min.	30 min.	15 min.
	PM rush	20-30 min.	60 min.	60 min.	15 min.

Why are we proposing these changes?

- Truncating Routes 511, 512 and 513 at Northgate Station provides consistent service levels from Snohomish County by leveraging the new Link extension at Northgate and conserving resources. Community Transit would continue to provide service between Lynnwood / Ash Way and Downtown Seattle in the commute direction.
- Route 510 would continue to provide direct service to downtown Seattle. A new stop at Mountlake Terrace would provide a connection for riders wishing to connect with the rest of the network.

What does this mean for riders?

Benefits

- Increased service levels on Route 513, in addition to two new stops at Ash Way Park-and-Ride and Lynnwood Transit Center, would provide much more frequent peak service for Snohomish County riders.
- Ending Routes 511, 512 and 513 at Northgate would allow riders to access new destinations served by Link light rail and avoid congestion on part of I-5.
- Route 510 riders would continue to have direct access to downtown Seattle and would also have the option to transfer at Mountlake Terrace to routes serving Northgate Station.

Tradeoffs

- Riders on Routes 511, 512 and 513 would need to transfer in order to reach downtown Seattle, which could save up to 2 minutes or increase travel time by up to 6 minutes. Buses will drop off close to the station but riders will need to walk to the platform.
- The addition of stops at Ash Way Park-and-Ride and Lynnwood Transit Center on Route 513 would result in greater travel time for riders traveling to Everett.
- The addition of the Mountlake Terrace stop on Route 510 would result in approximately 2 minutes greater travel time for riders traveling to downtown Seattle.
- Removing the 145th St. stop on Route 512 would cause riders who use that stop to use alternate service.

Draft Title VI evaluation

Route 510

- **No disparate impact** - the proposed change impacts an area with a minority population of **39.1%**, lower than the Sound Transit District average of **39.7%.**
- **Disproportionate burden** - the proposed change impacts an area with a low-income population of **20.5%**, higher than the Sound Transit District average of **16.4%.**
- Due to the determination of a disproportionate burden, results from public input and a review of alternatives will help shape the final proposal.

Route 512

- **No disparate impact** - the proposed change impacts an area with a minority population of **38.7%**, lower than the Sound Transit District average of **39.7%.**
- **Disproportionate burden** - the proposed change impacts an area with a low-income population of **18.5%**, higher than the Sound Transit District average of **16.4%.**
- Due to the determination of a disproportionate burden, results from public input and a review of alternatives will help shape the final proposal.

Route 511

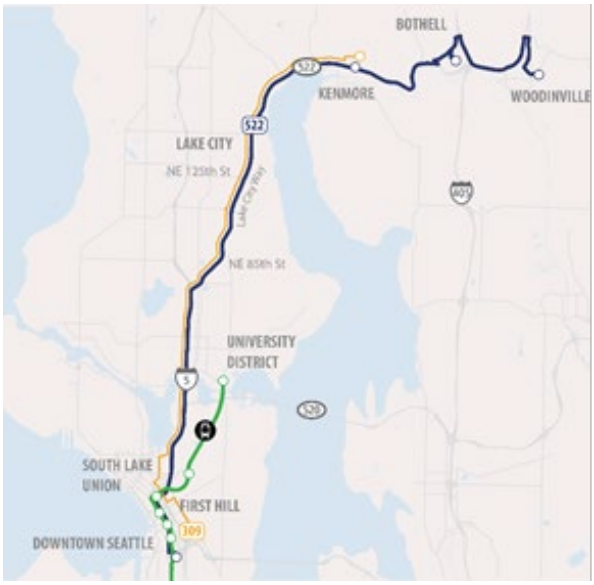
- **No disparate impact** - the proposed change impacts an area with a minority population of **38.8%,** lower than the Sound Transit District average of **39.7%.**
- **No disproportionate burden** - the proposed change impacts an area with a low-income population of **16.0%**, lower than the Sound Transit District average of **16.4%.**

Route 513

- **No disparate impact** - the proposed change impacts an area with a minority population of **37.5%**, lower than the Sound Transit District average of **39.7%.**
- **Disproportionate burden** - the proposed change impacts an area with a low-income population of **17.8%**, higher than the Sound Transit District average of **16.4%.**
- Due to the determination of a disproportionate burden, results from public input and a review of alternatives will help shape the final proposal.

Routes 522 *Woodinville – Seattle via SR 522*

Current Route Map



Proposed (September 2021)

Route 522: Woodinville to Seattle

Proposed Service Changes

- **September 2020*:*** Daily trips reduced from 103 to 98.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** End at Roosevelt Station. Improve midday and weekend service levels to operate every 15 minutes.

	Time of day	March 2020	September 2020	March 2021 Proposal	September 2021 Proposal
How often do buses run on weekdays?	Early AM	10 min.	15 min.	15 min.	15 min.
	AM rush	7 min.	7 min.	7 min.	15 min.
	Midday	30 min.	30 min.	30 min.	15 min.
	PM rush	8 min.	8 min.	8 min.	15 min.
	Evening	30 min.	30 min.	30 min.	15 min.
	Late evening	60 min.	60 min.	60 min.	30 min.
How often do buses run on Saturdays?	All day	30 min.	30 min.	30 min.	15 min.
How often do buses run on Sundays?	All day	30 min.	30 min.	30 min.	15 min.

Why are we proposing these changes?

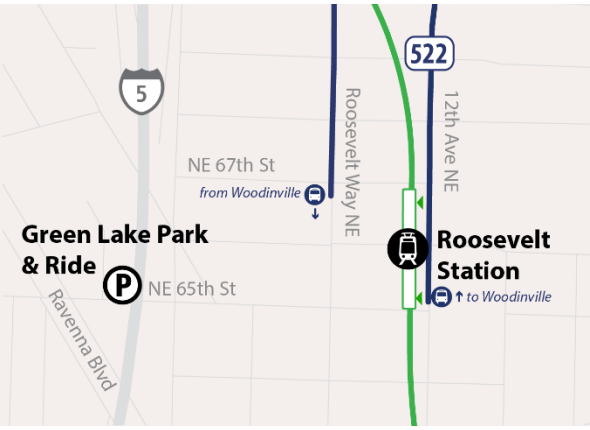
- Truncating Route 522 at Roosevelt Station provides consistent service levels from North King County by leveraging the new Northgate Link extension and conserving resources.
- During peak periods, additional capacity will be provided in the SR-522 corridor by the proposed King County Metro Route 309 and 322

- Route 309 and 322 will also connect with Link at Northgate and Roosevelt stations while also providing access to destinations near downtown Seattle less well-served by light rail
- Timing of trips on among the three routes will be coordinated to provide consistent spacing of buses.

What does this mean for riders?

Benefits

- Truncating Route 522 at Roosevelt would allow riders to access new destinations served by Link and avoid congestion on part of I-5.
- In September 2021, midday, evening and weekend service would increase to every 15 minutes.



Tradeoffs

- Riders would need to transfer in order to reach downtown Seattle, which could increase travel times by an estimated 2-10 minutes in off-peak times. The transfer requires walking 1-2 blocks as shown in the map.
- Rush hour frequency would be reduced in order to provide higher midday, evening, and weekend frequency. King County Metro will continue to provide parallel service on the corridor, supplementing Route 522 during rush hour.

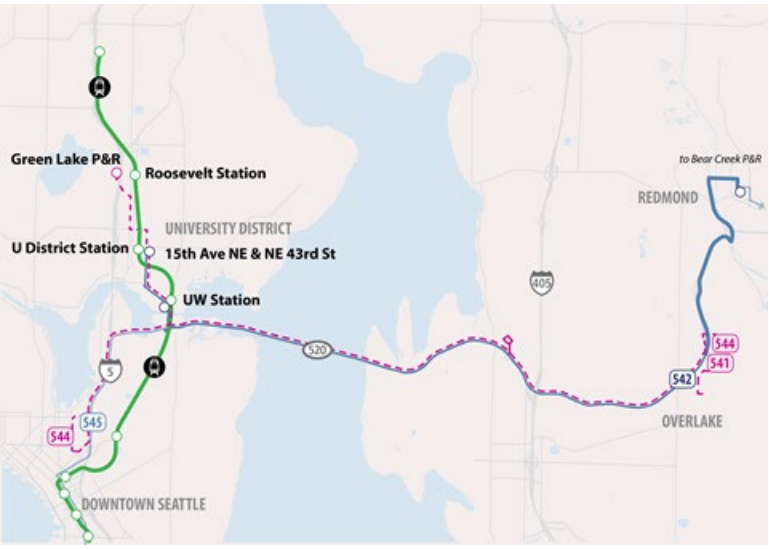
Draft Title VI evaluation

- **No disparate impact** - the proposed change impacts an area with a minority population of **32.1%**, lower than the Sound Transit District average of **39.7%.**
- **No disproportionate burden** - the proposed change impacts an area with a low-income population of **13.3%**, lower than the Sound Transit District average of **16.4%.**

Routes 541/542/544/545 East King County - Seattle via SR-520

March 2020 Route Map

Proposed (September 2021) Route Map



Route 541 *(Rush hour only)*: Overlake – University District

Proposed Service Changes

- **September 2020*:*** Service suspended.
- **March 2021 *Proposal*:** Service remains suspended.
- **September 2021 *Proposal*:** Service remains suspended.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on weekdays?	AM Rush	15 min.	--	--
	PM Rush	20 min.	--	--

Route 542: Redmond – University District

Proposed Service Changes

- **September 2020:** Daily weekday trips reduced from 90 to 81.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Maintain September 2020 service levels. Discontinue service between U District and Green Lake Park-and-Ride

	Time of day	March 2020	September 2020	2021 Proposal
How often do buses run on weekdays?	Early AM	20 min.	20 min.	20 min.
	AM rush	15 min.	20 min.	20 min.
	Midday	30 min.	30 min.	30 min.
	PM rush	15 min.	20 min.	20 min.
	Evening	30 min.	30 min.	30 min.

Route 544 *(Rush hour only)*: Overlake to South Lake Union

Proposed Service Changes

- **September 2020*:*** Service suspended.
- **March 2021 *Proposal*:** Service remains suspended.
- **September 2021 *Proposal*:** Service remains suspended.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	AM Rush	15 min.	--	--
	PM Rush	15 min.	--	--

Route 545: Redmond – Seattle

Proposed Service Changes

- **September 2020:** Daily weekday trips reduced from 185 to 163.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal:*** Maintain September 2020 service levels.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	30 min.	30 min.	30 min.
	AM Rush	6 min.	7 min.	7 min.
	Midday	15 min.	15 min.	15 min.
	PM Rush	5 min.	9 min.	9 min.
	Evening	20 min.	20 min.	20 min.
	Late evening	60 min.	60 min.	60 min.
How often do buses run on Saturdays?	All day	30 min.	30 min.	30 min.
How often do buses run on Sundays?	All day	30 min.	30 min.	30 min.

Why are we proposing these changes?

- Routes 541 and 544 primarily serve technology hubs, and ridership on these routes is not expected to rebound in 2021 due to workers continuing to work from home.
- Service adjustments in September 2020 were necessary to preserve coverage to the 520 corridor and conserve resources as a result of the COVID-19 pandemic.
- In March 2021, service levels from September 2020 would be maintained because ridership is not expected to rebound significantly on many routes through 2021.

What does this mean for riders?

Benefits

- Suspending Routes 541 and 544 allows Sound Transit to focus resources where they're most needed on the 520 corridor and avoid further service reductions on other routes.

Tradeoffs

- Riders on Routes 545 and 542 would experience longer waits.
- Instead of Route 544, riders traveling from Overlake Park-and-Ride to South Lake Union may connect with Route 545 by walking or taking KCM Rapid Ride B Line or Route 269 to the SR 520 at NE 40th St. Freeway stop. This involves a new transfer and about a one-block walk.
- Riders traveling from South Kirkland Park-and-Ride to downtown Seattle may connect with Route 545 via KCM Route 255 at the Evergreen Point or Yarrow Point freeway stations. This involves a new transfer but no walking is required at the transfer.
- Instead of Route 541, riders traveling from Overlake Park-and-Ride to the U District may connect with Route 542 by walking or taking KCM Rapid Ride B Line or Route 269 to the SR 520 at NE 40th St. freeway stop. This involves a new transfer and longer walk access times.

Figure 1: Route 541 travel alternatives

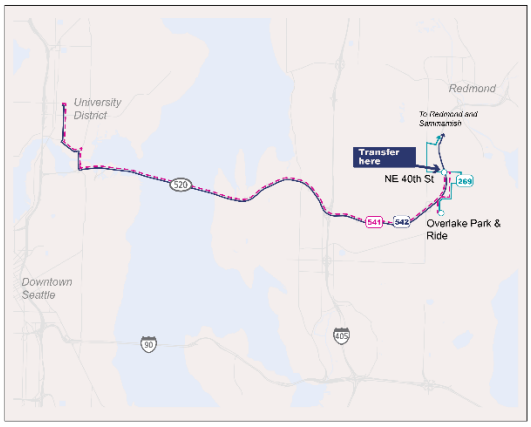
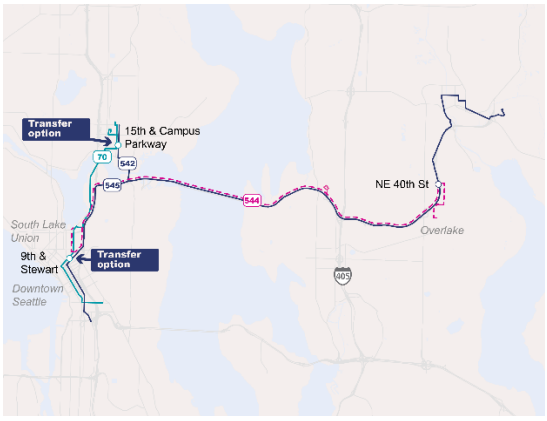


Figure 2: Route 544 travel alternatives



Draft Title VI evaluation

Route 541

- **Disparate impact** - the proposed change impacts an area with a minority population of **45.1%**, higher than the Sound Transit District average of **39.7%.**
- **No disproportionate burden** - the proposed change impacts an area with a low-income population of **14.8%**, lower than the Sound Transit District average of **16.4%.**

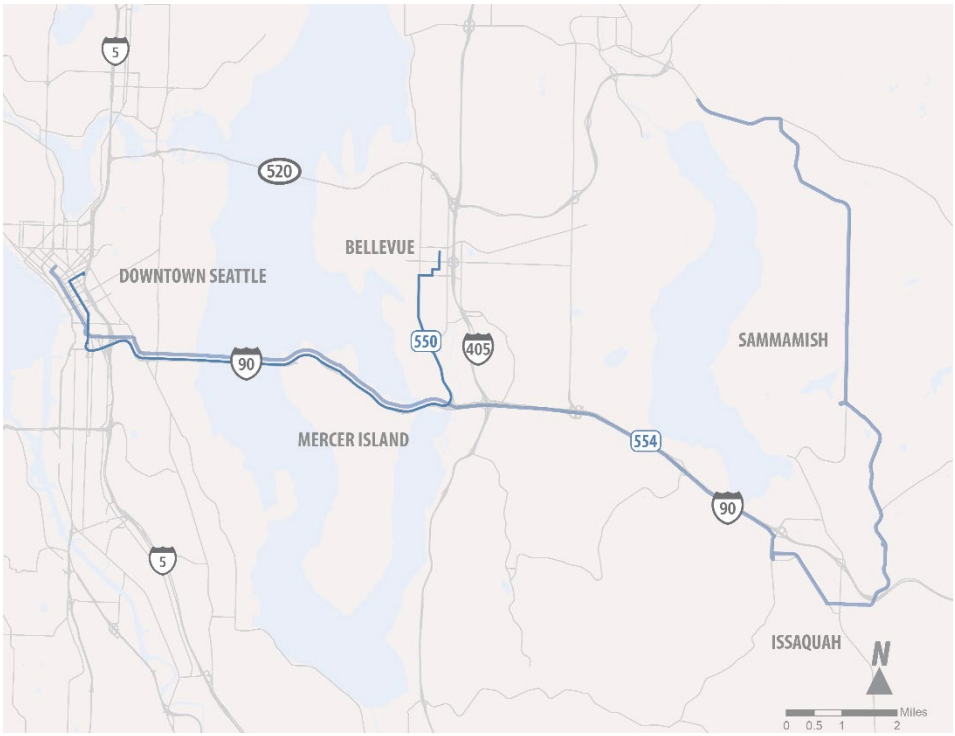
- Due to the determination of a disparate impact, results from public input and a review of alternatives will help shape the final proposal.

Route 544

- **Disparate impact** - the proposed change impacts an area with a minority population of **42.4%**, higher than the Sound Transit District average of **39.7%.**
- **No disproportionate burden** - the proposed change impacts an area with a low-income population of **10.7%**, lower than the Sound Transit District average of **16.4%.**
- Due to the determination of a disparate impact, results from public input and a review of alternatives will help shape the final proposal.

Routes 550/554 *Eastside – Seattle via I-90*

Current and Proposed Route Map



Route 550: Bellevue – Seattle

Proposed Service Changes

- **September 2020*:*** Trips reduced from 181 to 167 daily weekday trips.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Maintain September 2020 service levels.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	30 min.	30 min.	30 min.
	AM Rush	5 min.	7 min.	7 min.
	Midday	15 min.	15 min.	15 min.
	PM Rush	5 min.	7 min.	7 min.
	Evening	30 min.	30 min.	30 min.
	Late evening	60 min.	30 min.	30 min.
How often do buses run on Saturdays?	All day	15 min.	15 min.	15 min.
How often do buses run on Sundays?	All day	30 min.	30 min.	30 min.

Route 554: Issaquah – Seattle

Proposed Service Changes

- **September 2020*:*** No changes. Maintain full service.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Maintain September 2020 service levels.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	30 min.	30 min.	30 min.
	AM Rush	15 min.	15 min.	15 min.
	Midday	20 min.	20 min.	20 min.
	PM Rush	15 min.	15 min.	15 min.
	Evening	60 min.	60 min.	60 min.
	Late evening	60 min.	60 min.	60 min.
How often do buses run on Saturdays?	All day	30 min.	30 min.	30 min.
How often do buses run on Sundays?	All day	30 min.	30 min.	30 min.

Why are we proposing these changes?

- Service adjustments in September 2020 were necessary on Route 550 in order to preserve coverage to all areas of the system and conserve resources as a result of the COVID-19 pandemic.
- In March 2021, service levels on Route 550 from September 2020 would be maintained because ridership is not expected to rebound significantly through 2021 as many office workers continue to work remotely.
- Route 554 would maintain full service in order to maintain coverage on the I-90 corridor, where alternate routes at King County Metro have been impacted.

What does this mean for riders?

Benefits

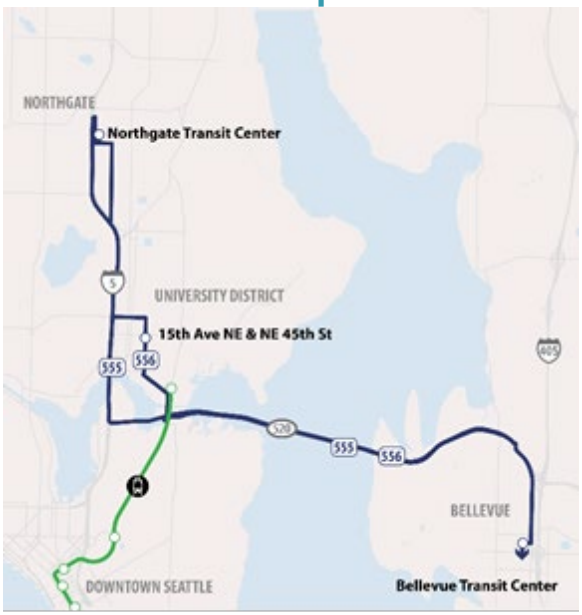
- Route 550 coverage would be maintained.
- Route 554 would maintain full service.

Tradeoffs

- Route 550 riders would experience 1-2 minute longer wait times at the peak hour.

Routes 555/556 *Northgate – Bellevue/Issaquah*

Current Route Map



Proposed (September 2021)

Route 555 *(Rush hour only)*: Bellevue – Northgate

Proposed Service Changes

- **September 2020*:*** Service suspended.
- **March 2021 *Proposal*:** Continue suspension of service.
- **September 2021 *Proposal*:** Restore service. Route would operate between Bellevue and the U District Link station.

	Time of day	March 2020	September 2020	March 2021 Proposal	September 2021 Proposal
How often do buses run on weekdays?	Early AM	40 min.	--	--	30 min.
	AM rush	20 min.	--	--	30 min.
	PM rush	30 min.	--	--	30 min.

Route 556 *(Rush hour only)*: Issaquah – Northgate

Proposed Service Changes

- **September 2020*:*** Service was suspended.
- **March 2021 *Proposal*:** Service remains suspended.
- **September 2021 *Proposal*:** Restore service. Route would operate between Issaquah Highlands and the U District Link station.

	Time of day	March 2020	September 2020	March 2021 Proposal	September 2021 Proposal
How often do buses run on weekdays?	Early AM	30 min.	--	--	30 min.
	AM Rush	30 min.	--	--	30 min.
	PM Rush	30 min.	--	--	30 min.

Why are we proposing these changes?

- Routes 555 and 556 primarily serve commuters, and ridership on these routes is not expected to rebound in 2021 due to workers continuing to work from home.
- In March 2021, suspension would be maintained because ridership is not expected to rebound significantly until late 2021.
- Ending at U District Station provides consistent service levels to and from Bellevue and Issaquah in September 2021 by leveraging the new Link extension and conserving resources.

What does this mean for riders?

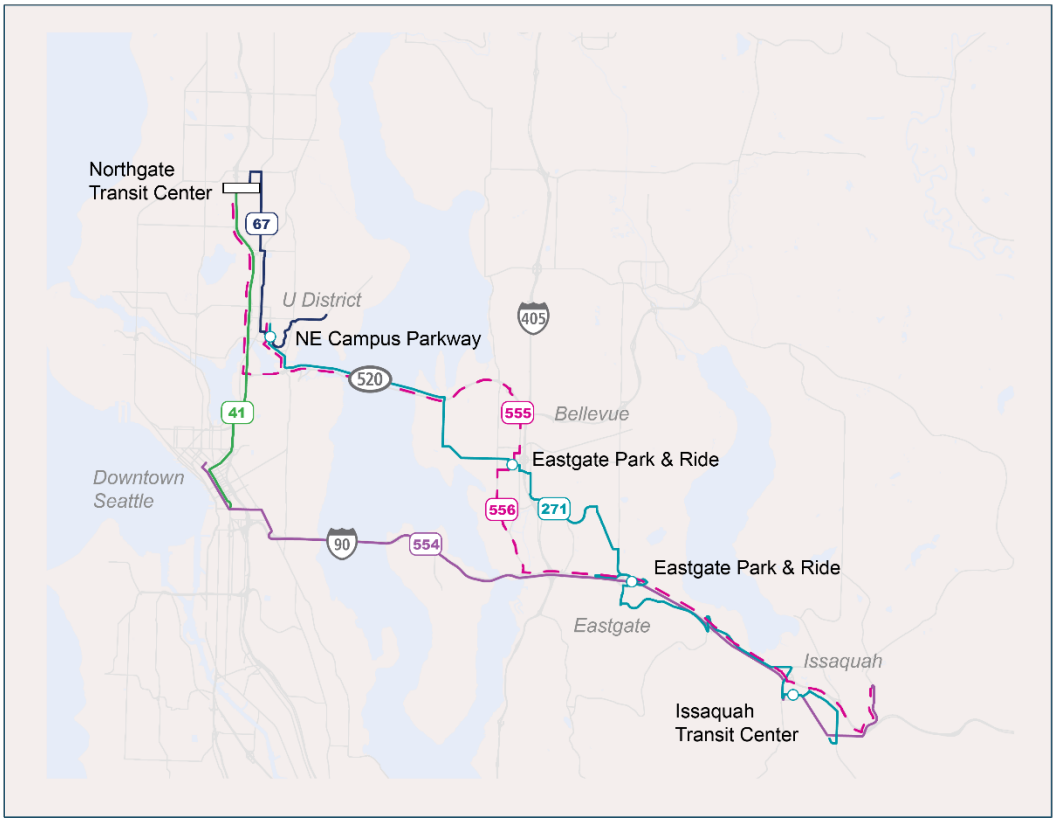
Benefits

- Ending at U District Station instead of Northgate would allow the restoration of service while conserving resources.
- Ending routes at U District would improve connections to destinations served by Link and avoid congestion on part of I-5.

Tradeoffs

- Riders would need to transfer to travel between Northgate and the Eastside.
- Before September 2021, riders can use King County Metro Route 41 and transfer to a Bellevue-bound 550 or an Issaquah-bound 554. Bellevue-bound riders can also use King County Metro routes 67 and 271 with a connection in the University District. The transfer will add travel time and require walking between stops.
- After September 2021, riders can transfer from Link to Route 555 or 556 in the U District.

Figure 1: Route 555/556 travel alternatives



Draft Title VI evaluation

Route 555

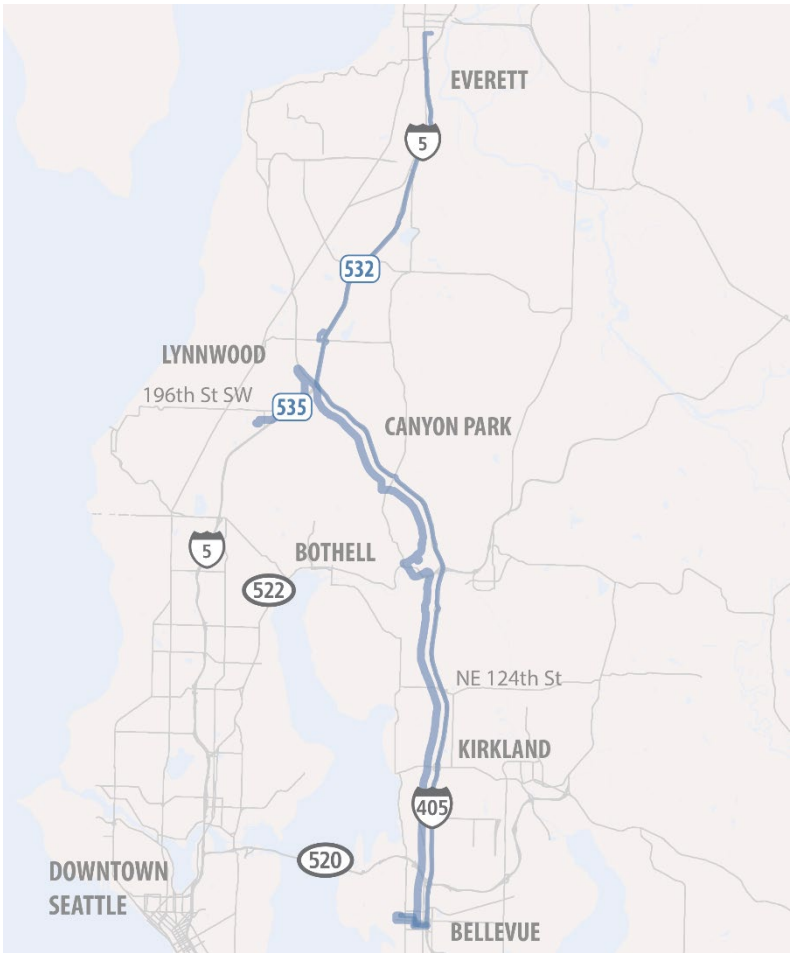
- **No disparate impact** - the proposed change impacts an area with a minority population of **30.3%,** lower than the Sound Transit District average of **39.7%.**
- **No disproportionate burden** - the proposed change impacts an area with a low-income population of **14.7%,** lower than the Sound Transit District average of **16.4%.**

Route 556

- **No disparate impact** - the proposed change impacts an area with a minority population of **35.9%,** lower than the Sound Transit District average of **39.7%.**
- **No disproportionate burden** - the proposed change impacts an area with a low-income population of **14.7%**, lower than the Sound Transit District average of **16.4%.**

Routes 532/535 *Snohomish County – Bellevue*

Current and Proposed Route Map



Route 532 *(Rush hour only)*: Everett – Bellevue

Proposed Service Changes

- **September 2020***:* Daily weekday trips reduced from 41 to 20. AM Peak Service from Bellevue to Everett and PM Peak service from Everett to Bellevue were eliminated.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Maintain September 2020 service levels.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	20 min.	50 min.	50 min.
	AM Rush	10 min.	20 min.	20 min.
	PM Rush	10 min.	10-20 min.	10-20 min.

Route 535 *(Monday – Saturday only)*: Lynnwood – Bellevue

Proposed Service Changes

- **September 2020:** Daily weekday trips reduced from 65 to 46.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Maintain September 2020 service levels.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	30 min.	60 min.	60 min.
	AM Rush	30 min.	30 min.	30 min.
	Midday	30 min.	60 min.	60 min.
	PM Rush	30 min.	30 min.	30 min.
	Evening	60 min.	60 min.	60 min.
How often do buses run on Saturdays?	All day	60 min.	60 min.	60 min.

Why are we proposing these changes?

- Ridership on Route 532 in the reverse-peak direction (towards Everett in the morning) is not expected to rebound in 2021 as many workers continue to work remotely.
- Service adjustments in September 2020 were necessary in order to preserve coverage on the 405 N corridor.
- In March 2021, service levels from September 2020 would be maintained because ridership is not expected to rebound significantly on commuter-oriented routes through 2021.

What does this mean for riders?

Benefits

- Service would be maintained in the peak period, peak direction on both routes (for commutes to Bellevue).

Tradeoffs

- Riders commuting from Bellevue to Everett would need to use Route 535 and transfer to Route 512 at Lynnwood Transit Center to complete their trip. The transfer is within Lynnwood Transit Center so walking is minimal.
- Other riders would experience longer wait times or would need to use alternate service.

Draft Title VI Evaluation

Route 532

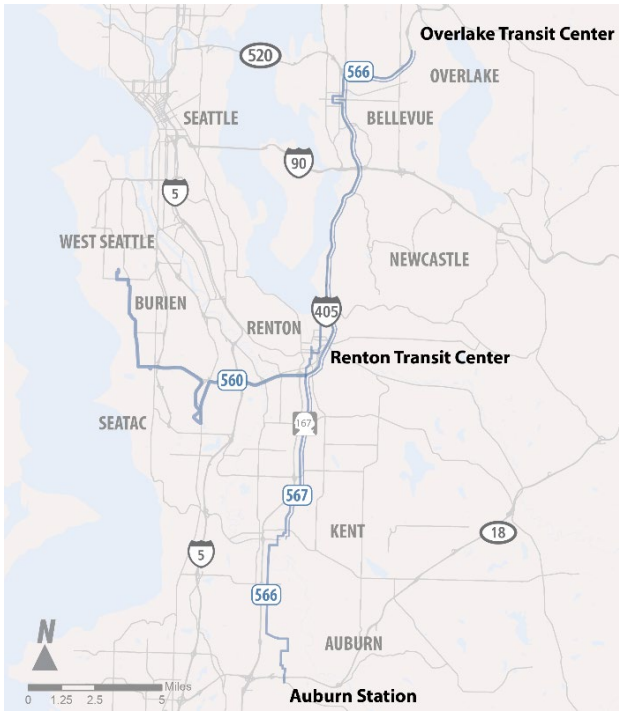
- **No disparate impact** - the proposed change impacts an area with a minority population of **38.6%**, lower than the Sound Transit District average of **39.7%.**
- **No disproportionate burden** - the proposed change impacts an area with a low-income population of **14.0%**, lower than the Sound Transit District average of **16.4%.**

Route 535

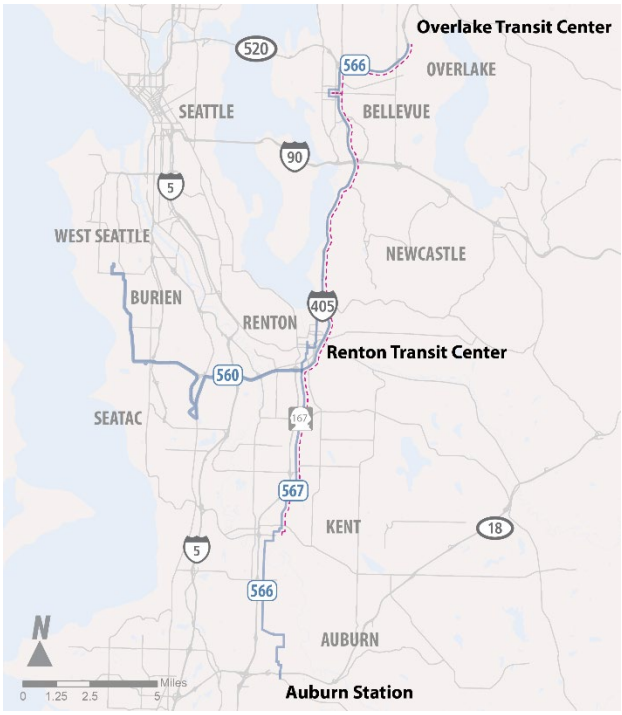
- **No disparate impact** - the proposed change impacts an area with a minority population of **36.8%,** lower than the Sound Transit District average of **39.7%.**
- **No disproportionate burden** - the proposed change impacts an area with a low-income population of **11.0%**, lower than the Sound Transit District average of **16.4%**

Routes 560/566/567 South King County – Bellevue/Overlake

Current Route Map



Proposed (2021) Route Map



Route 560: Bellevue – SeaTac – West Seattle

Proposed Service Changes

- **September 2020*:*** No changes. Maintain full service.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Maintain September 2020 service levels.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM/AM Rush	30 min.	30 min.	30 min.
	Midday/PM Rush	30 min.	30 min.	30 min.
	Evening/Late evening	60 min.	60 min.	60 min.
How often do buses run on Saturdays?	All day	60 min.	60 min.	60 min.
How often do buses run on Sundays?	All day	60 min.	60 min.	60 min.

Route 566: Auburn – Overlake

Proposed Service Changes

- **September 2020:** Daily weekday trips reduced from 54 to 38. Midday service suspended.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Maintain September 2020 service levels.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	30 min.	40 min.	40 min.
	AM Rush	15 min.	20 min.	20 min.
	Midday	60 min.	--	--
	PM Rush	15 min.	20 min.	20 min.

Route 567 *(Rush hour only)*: Kent – Overlake

Proposed Service Changes

- ***September 2020***: Service suspended.
- ***March 2021 Proposal:*** Service remains suspended
- ***September 2021 Proposal:*** Service remains suspended.

	Time of Day	March 2020	September 2020	March 2021 Proposal	September 2021 Proposal
How often do buses run on Weekdays?	AM Rush	20 min.	--	--	--
	PM Rush	20 min.	--	--	--

Why are we proposing these changes?

- Route 567 primarily serves commuters, and ridership on this route is not expected to rebound in 2021 due to workers continuing to work remotely.
- Service adjustments in September 2020 were necessary to preserve coverage on South King County routes.
- In March 2021, service levels from September 2020 would be maintained because ridership is not expected to rebound significantly on many routes through 2021.

What does this mean for riders?

Benefits

- Suspending Route 567 allows for greater frequency and coverage on Routes 560 and 566 than would otherwise be possible.

Tradeoffs

- Riders traveling between Auburn and Bellevue during midday would need to use King County Metro Route 160 between Auburn, Kent, and Renton, and Route 560 between Renton and Bellevue.
- Riders traveling between Kent and Bellevue/Overlake in peak hours would need to use Route 566, which would add up to 13 minutes of travel time in the evening rush hour.

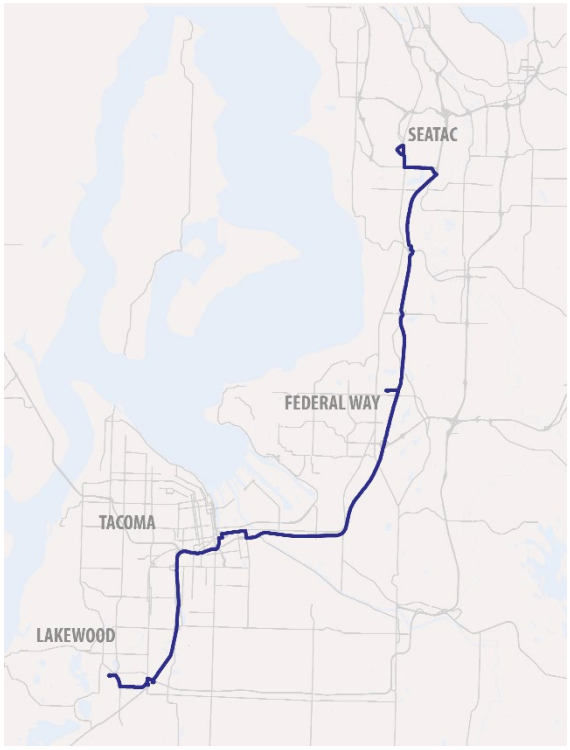
Draft Title VI Evaluation

Route 567

- **Disparate impact** - the proposed change impacts an area with a minority population of **54.6%**, lower than the Sound Transit District average of **39.7%.**
- **Disproportionate burden** - the proposed change impacts an area with a low-income population of **17.9%**, higher than the Sound Transit District average of **16.4%.**
- Due to the determination of a disparate impact, results from public input and a review of alternatives will help shape the final proposal.

Route 574 *Lakewood – SeaTac Airport*

Current and Proposed Route Map



Route 574: Lakewood – SeaTac

Proposed Service Changes

- **September 2020*:*** Maintain 76 daily weekday trips (no change).
- **March 2021 *Proposal*:** Maintain 76 daily weekday trips (no change).
- **September 2021 *Proposal*:** Maintain 76 daily weekday trips (no change).

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	30 min.	30 min.	30 min.
	AM Rush	30 min.	30 min.	30 min.
	Midday	30 min.	30 min.	30 min.
	PM Rush	30 min.	30 min.	30 min.
	Evening	30 min.	30 min.	30 min.
	Late Evening	60 min.	60 min.	60 min.
How often do buses run on Saturdays?	All Day	60 min.	60 min.	60 min.
How often do buses run on Sundays?	All Day	60 min.	60 min.	60 min.

Why are we proposing no changes?

- Compared to other routes, ridership declined the least on Route 574 between July 2019 and July 2020. As such, ridership demand remains comparatively high.

What does this mean for riders?

Benefits

- Routes 574 would continue to operate without changes.

Routes 577/578 South King County – Seattle

Current and Proposed Route Map

Route 577 *(Rush hour & weekends only)*: Federal Way – Seattle

Proposed Service Changes

- **September 2020*:*** Trips were re-scheduled to better coordinate service with Route 578 between Seattle and Federal Way. Southbound departures have a combined frequency of every 10-15 minutes after 11:30 am. The number of trips remained the same.
- **March 2021 *Proposal*:** No change
- **September 2021 *Proposal*:** No change

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	15 min.	15 min.	15 min.
	AM Rush	8 min.	8 min.	8 min.
	Midday	-	30 min.	30 min.
	PM Rush	9 min.	10-20 min.*	10-20 min.*
How often do buses run on Saturdays?	All day	60 min.	60 min.	60 min.
How often do buses run on Sundays?	All day	60 min.	60 min.	60 min.

*During the PM Rush Hour, combined frequency between Route 577 and Route 578 is every 10 minutes between Seattle and Federal Way.

Route 578: Puyallup – Seattle

Proposed Service Changes

- **September 2020*:*** The number of daily weekday trips was increased from 55 to 62, providing additional southbound service during the afternoon rush hours (Route 578 previously did not operate southbound during the afternoon).
- **March 2021 *Proposal*:** Maintain September 2020 increased service levels.
- **September 2021 *Proposal*:** Maintain September 2020 increased service levels.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	120 min.	120 min.	120 min.
	AM Rush	30 min.	30 min.	30 min.
	Midday	30 min.	30 min.	30 min.
	PM Rush	30 min.	30 min.	30 min.
	Evening	30 min.	30 min.	30 min.
	Late Evening	60 min.	60 min.	60 min.
How often do buses run on Saturdays?	All Day	60 min.	60 min.	60 min.
How often do buses run on Sundays?	All Day	60 min.	60 min.	60 min.

Why are we proposing these changes?

- With the suspension of some Sounder trips, service would be added to Route 578, providing options between Seattle, Auburn, Sumner, and Puyallup when Sounder is not running.
- Compared to other routes, Routes 577 and Route 578 has experienced less decline in ridership.

What does this mean for riders?

Benefits

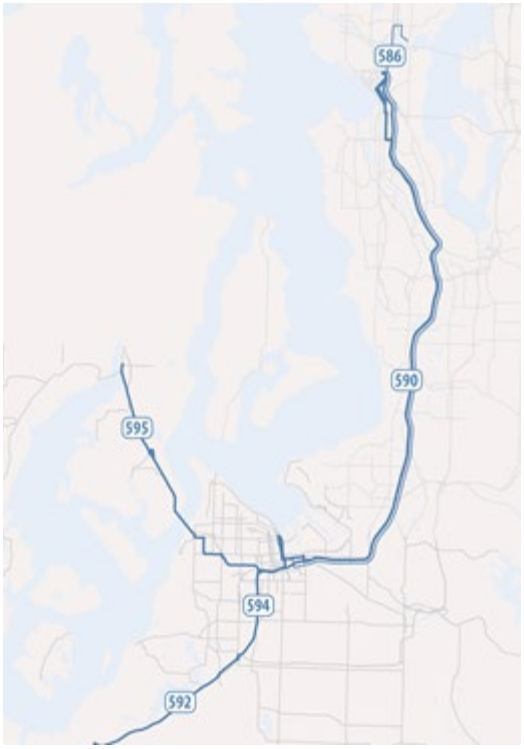
- Routes 577 and 578 would continue to have full service with additional southbound trips in the afternoon rush hour.

Tradeoffs

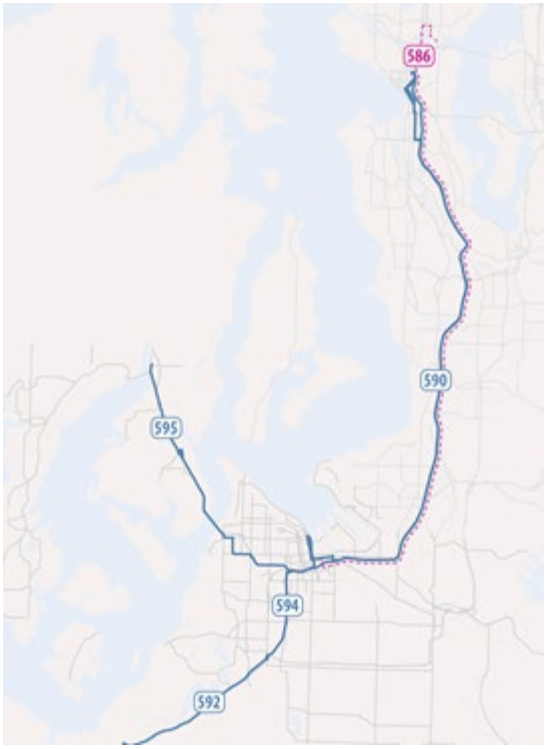
- Route 578 trips may be more full with riders who previously used canceled trains now using the route to access Auburn, Sumner, and Puyallup stations.

Routes 586/590/592/594/595 *Pierce County – Seattle*

Current Route Map



Proposed (September 2021)



Route 586 *(Rush hour only)*: Tacoma – U District

Proposed Service Changes

- **September 2020*:*** Daily weekday trips reduced from 16 to 14.
- **March 2021 *Proposal*:** Maintain September 2020 levels.
- **September 2021 *Proposal*:** Discontinue route with Link being extended to Northgate.

	Time of day	March 2020	September 2020	March 2021 Proposal	September 2021 Proposal
How often do buses run on weekdays?	Early AM	30 min.	30 min.	30 min.	Route discontinued
	AM rush	30 min.	30 min.	30 min.	
	PM rush	30 min.	30 min.	30 min.	

Route 590 *(Rush hour only)*: Tacoma – Seattle

Proposed Service Changes

- **September 2020*:*** Daily weekday trips reduced from 76 to 61.
- **March 2021 *Proposal*:** Daily weekday trips would increase to 70 daily weekday trips, supplemented by 6 trips serving the Tacoma Dome-Seattle corridor on Route 595.

- **September 2021 *Proposal*:** Maintain March 2021 service levels.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM	10 min.	15 min.	10 min.
	AM Rush	8 min.	8 min.	8 min.
	PM Rush	6 min.	8 min.	6 min.

Route 592 *(Rush hour only)*: DuPont/Lakewood – Seattle

Proposed Service Changes

- **September 2020:** Daily weekday trips reduced from 31 to 24.
- **March 2021 *Proposal*:** Maintain September 2020 service levels.
- **September 2021 *Proposal*:** Maintain September 2020 service levels.

	Time of day	March 2020	September 2020	2021 Proposal
How often do buses run on weekdays?	Early AM	20 min.	20 min.	20 min.
	AM rush	15 min.	20 min.	20 min.
	PM rush	15 min.	20 min.	20 min.

Route 594: Lakewood – Seattle

- **September 2020:** Continue operating full service with 66 daily weekday trips.
- **March 2021 *Proposal*:** Continuing operating full service with 66 daily weekday trips.
- **September 2021 *Proposal:*** Continuing operating full service with 66 daily weekday trips.

	Time of Day	March 2020	September 2020	2021 Proposal
How often do buses run on Weekdays?	Early AM/AM Rush	30 min.	30 min.	30 min.
	Midday/PM Rush/Evening	30 min.	30 min.	30 min.
	Late evening	30 min.	30 min.	30 min.
How often do buses run on Saturdays?	All day	30 min.	30 min.	30 min.
How often do buses run on Sundays?	All day	30 min.	30 min.	30 min.

Route 595 *(Rush hour only)*: Gig Harbor – Seattle

Proposed Service Changes

- **September 2020:** Daily weekday trips reduced from 10 to 6.
- **March 2021 *Proposal*:** Continue September 2020 levels. Add new stop at Tacoma Dome Station.
- **September 2021 *Proposal:*** Continue September 2020 levels with stop at Tacoma Dome Station.

	Time of day	March 2020	September 2020	March 2021 Proposal
How often do buses run on weekdays?	Early AM / AM rush	20 min.	60 min.	60 min.
	PM rush	30 min.	60 min.	60 min.

Why are we proposing these changes?

- With the opening of Northgate Link, light rail will cover all areas in Seattle that Route 586 currently serves. In order to preserve resources, this route is proposed to be eliminated due to this duplicative coverage, allowing investment on other routes on the I-5 South corridor.
- Routes 590 and 594 had higher ridership compared to other routes during the COVID-19 pandemic. As such, Routes 590 and 594 would continue to have higher levels of service.
- Route 595 has both historically and currently had low ridership. Adding a stop at Tacoma Dome Station would allow for additional capacity on the Seattle-Tacoma corridor while conserving resources. Currently Pierce Transit 102, which operates between Gig Harbor and Tacoma, is suspended. Adding a stop at Tacoma Dome Station would provide a replacement for this suspended route.

What does this mean for riders?

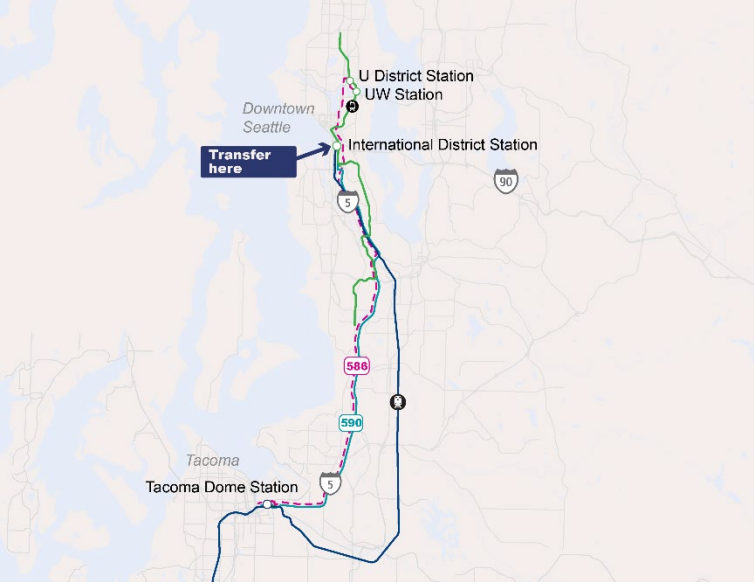
Benefits

- During times when I-5 is congested through Downtown Seattle, travel times may be faster between Tacoma and U District using Sounder and Link compared to Route 586.
- Route 595 serving Tacoma Dome Station would restore a service option between Gig Harbor and Tacoma, which has remained suspended (Pierce Transit 102).
- Routes 590/594 would continue to have high levels of service throughout the day, matching the demand on these routes.

Tradeoffs

- Route 586 passengers would need to use Route 590/594 or Sounder to Seattle and transfer to Link light rail for continuing service to the U District, requiring a walk between stations. When congestion is lighter, travel times are comparable, offering few benefits to offset the transfer.
- Route 592 passengers would have longer wait times.
- Route 595 passengers would experience fuller trips and slightly longer trip times with the additional stop.

Figure 1: Route 586 travel alternatives



Draft Title VI evaluation

Route 586

- **Disparate impact** - the proposed change impacts an area with a minority population of **45.4%**, higher than the Sound Transit District average of **39.7%.**
- **Disproportionate burden** - the proposed change impacts an area with a low-income population of **33.7%**, higher than the Sound Transit District average of **16.4%.**
- Due to the determination of both a disparate impact and disproportionate burden, results from public input and a review of alternatives will help shape the final proposal.

Route 592

- **Disparate impact** - the proposed change impacts an area with a minority population of **47.1%**, higher than the Sound Transit District average of **39.7%.**
- **Disproportionate burden** - the proposed change impacts an area with a low-income population of **25.4%**, higher than the Sound Transit District average of **16.4%.**
- Due to the determination of both a disparate impact and disproportionate burden, results from public input and a review of alternatives will help shape the final proposal.

Route 595

- **No disparate impact** - the proposed change impacts an area with a minority population of **35.5%**, lower than the Sound Transit District average of **39.7%.**
- **Disproportionate burden** - the proposed change impacts an area with a low-income population of **19.7%**, higher than the Sound Transit District average of **16.4%.**
- Due to the determination of a disproportionate burden, results from public input and a review of alternatives will help shape the final proposal.

Definitions & Methodology for Title VI Analysis

Policies and Definitions

The section below describes Sound Transit's approved policies for conducting and identifying major service changes, as well as for assessing their impacts on Title VI populations.

Service Standards and Performance Measures

Service standards and performance measures are a set of guidelines that are used to design, evaluate and modify transit service. The standards and measures establish baselines to obtain optimum efficiency and effectiveness in the system on a short-term basis, while maintaining or improving the quality of service. Planning and day-to-day management of transit service is based on the established service standards and performance measures. The guidelines provide a multi-step process to identify the level and type of service that should be provided, as well as a process to implement any changes needed to meet established priorities.

The Service Standards and Performance Measures defines the criteria for making major or administrative service changes, as well as guidelines and driving factors for the type of changes needed to ensure Sound Transit services are meeting the demand for regional transit in the Puget Sound area.

Fare Equity Analysis Policy and Methodology

Sound Transit Board of Directors Resolution R2013-19 established policies for conducting equity analyses of fare changes impacting minority and low income populations.

The policy directs Sound Transit to conduct a fare equity analysis prior to making any fare change to analyze potential adverse effects on minority and low-income populations and establishes the following thresholds for determining whether the proposed fare change would have a disparate impact on minority populations and/or a disproportionate burden on low-income populations:

- A disparate impact occurs when the minority percentage of the population adversely affected by a fare change is greater than the average minority percentage of the population of Sound Transit's service area.

- A disproportionate burden occurs when the low income percentage of the population adversely affected by a fare change is greater than the average low income percentage of the population of Sound Transit's service area.

Per Sound Transit's policy, if any disparate impact or disproportionate burden is found during the fare equity analysis, Sound Transit will consider steps to avoid, minimize, or mitigate the adverse impacts and reanalyze the modified changes to determine if the impacts are removed or lessened.

Major Service Change

Resolution R2013-18, adopted by the Sound Transit Board of Directors in 2013, established policies for conducting equity analyses of major service changes and assessing the impacts on minority and low-income populations. This policy defines a major service change as follows:

- A major service change is any single change in service on an individual bus or rail route that would add or eliminate more than 25 percent of the route's weekly platform service hours,
- Move the location of a stop or station by more than a half mile.
- Closing or removing a stop or station without replacement within a half mile.

Adverse Effects

The adopted Sound Transit major service change policy, described above, also defines potential adverse effects of major service changes and thresholds for determining whether the proposed service change would have a disparate impact on minority populations and/or a disproportionate burden on low-income populations. The definitions are as follows:

- A potential **adverse effect** is defined as a geographical or time-based addition or reduction in service which includes but is not limited to: changes to span of service, changes to frequency of service, or elimination of routes or route segments.
- A **disparate impact** occurs when the minority percentage of the population adversely affected by a major service change is greater than the average minority percentage of the population of Sound Transit's service area.
- A **disproportionate burden** occurs when the low-income percentage of the population adversely affected by a major service change is greater than the average low-income percentage of the population of Sound Transit's service area.

Per Sound Transit's policy, if any disparate impact or disproportionate burden is found during the service equity analysis, Sound Transit will consider steps to avoid, minimize, or mitigate the adverse impacts and reanalyze the modified changes to determine if the impacts are removed or lessened.

Definitions and Data Analysis

The following sections describe the data definitions and methodologies used by Sound Transit to develop estimates for Title VI populations within the Sound Transit service area for Title VI analysis of service changes.

Demographic Analysis Methodology and Title VI Data Definitions

Sound Transit uses census demographic data to identify Title VI communities (Minority, Low Income, & Limited English Proficiency) for service equity analysis and calculates the system-wide or mode specific average representation of these communities within the general population. Only Minority or Low Income status are used to determine if a disparate impact or disproportionate burden must be mitigated or analyzed. However, identifying Limited English Proficiency (LEP) residents helps Sound Transit to ensure that outreach efforts reach diverse customers. Sound Transit uses the 2010 designated Census Tracts as the geographic basis for assessing the Title VI populations.

Sound Transit uses the most recent five-year demographic estimates available from American Community Survey (ACS). The ACS dataset identifies Minority, Low Income and LEP populations as follows:

- Minority: Persons who self-identify as being one or more of the following ethnic groups: American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian and Other Pacific Islander.
- Low income: Persons whose household income is below 150% of the federal poverty level.
- Limited English Proficiency (LEP): Persons who identify a language other than English as their primary language and are not fluent in English.

The following sections describe the methodology for identifying each of the Title VI populations for the purposes of the annual service equity analysis.

Service Area Methodology

Most transit agencies in the United States define their service area as a buffered distance around each of their transit routes. Given the unique service characteristics of Sound Transit service – limited stops connecting regional urban and employment centers – the agency defines its service area based on a radial distance from each transit stop, rather than the transit route alignment. Table 1 below provides details on Sound Transit's service area by stop type.

Table A-1 Sound Transit Service Area Definitions

Stop Type	Service Area (Miles)
Bus stop without parking	0.5
Rail station without parking	1.0
Major bus facilities with parking	2.5
Rail station with parking	5.5

Sound Transit Title VI Population Estimates
The population representation for any census tract is calculated using the percentage of area that falls within the district or mode's service area to estimate the specific number of people that fall within each of the Title VI categories. For example, if a census tract total is 10 acres and 3 acres are in the service area, based on the previously identified methodologies, then 30 percent of the tract's total population, and in turn the respective Title VI populations, is considered to be within the service area. This methodology assumes an even distribution of population throughout the census tract.

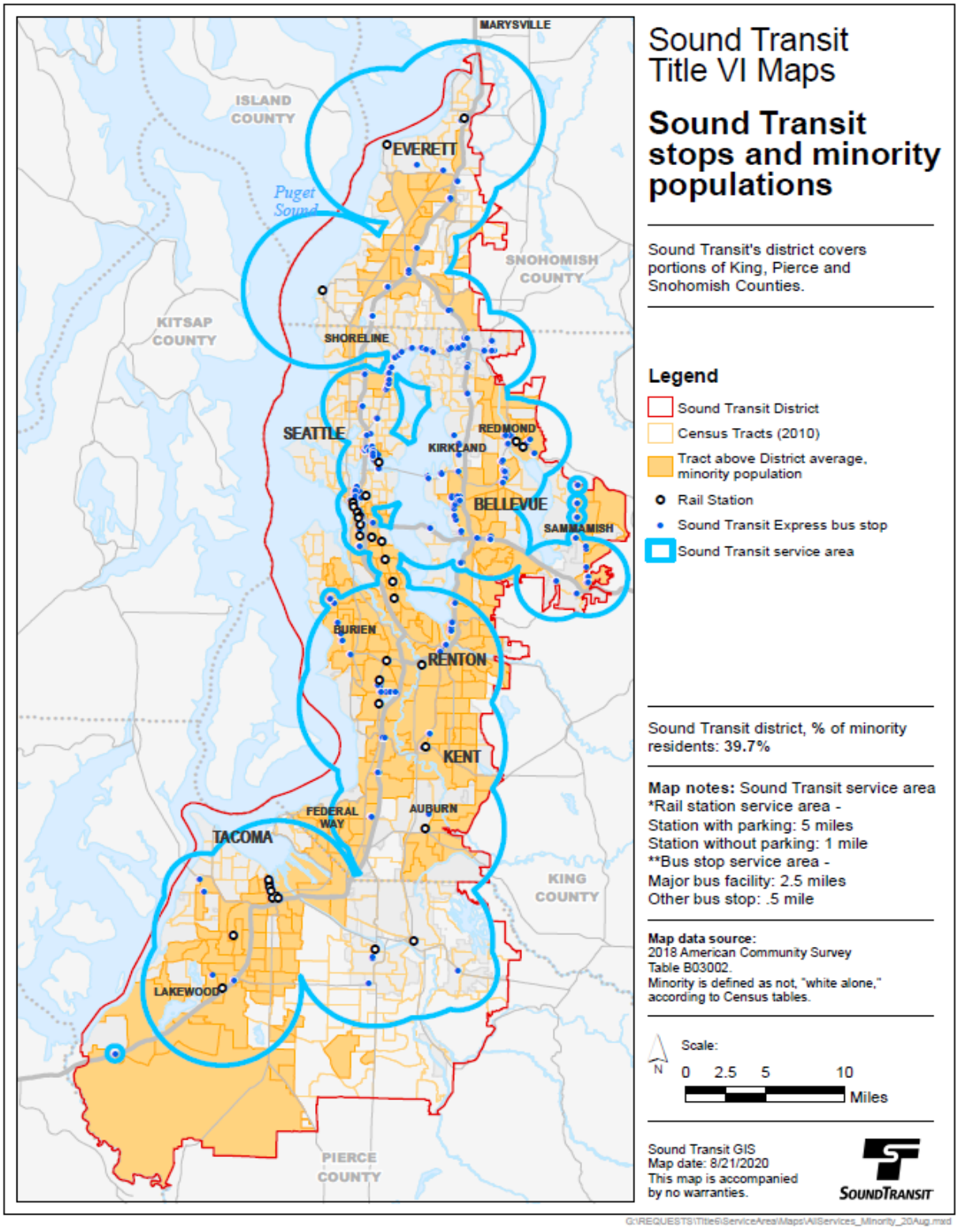
Using the demographic analysis and Title VI definitions previously outlined in this section, percentages for the three Title VI populations for the Sound Transit service area are identified by census tract and the district overall.

Table A-2 Sound Transit District Populations

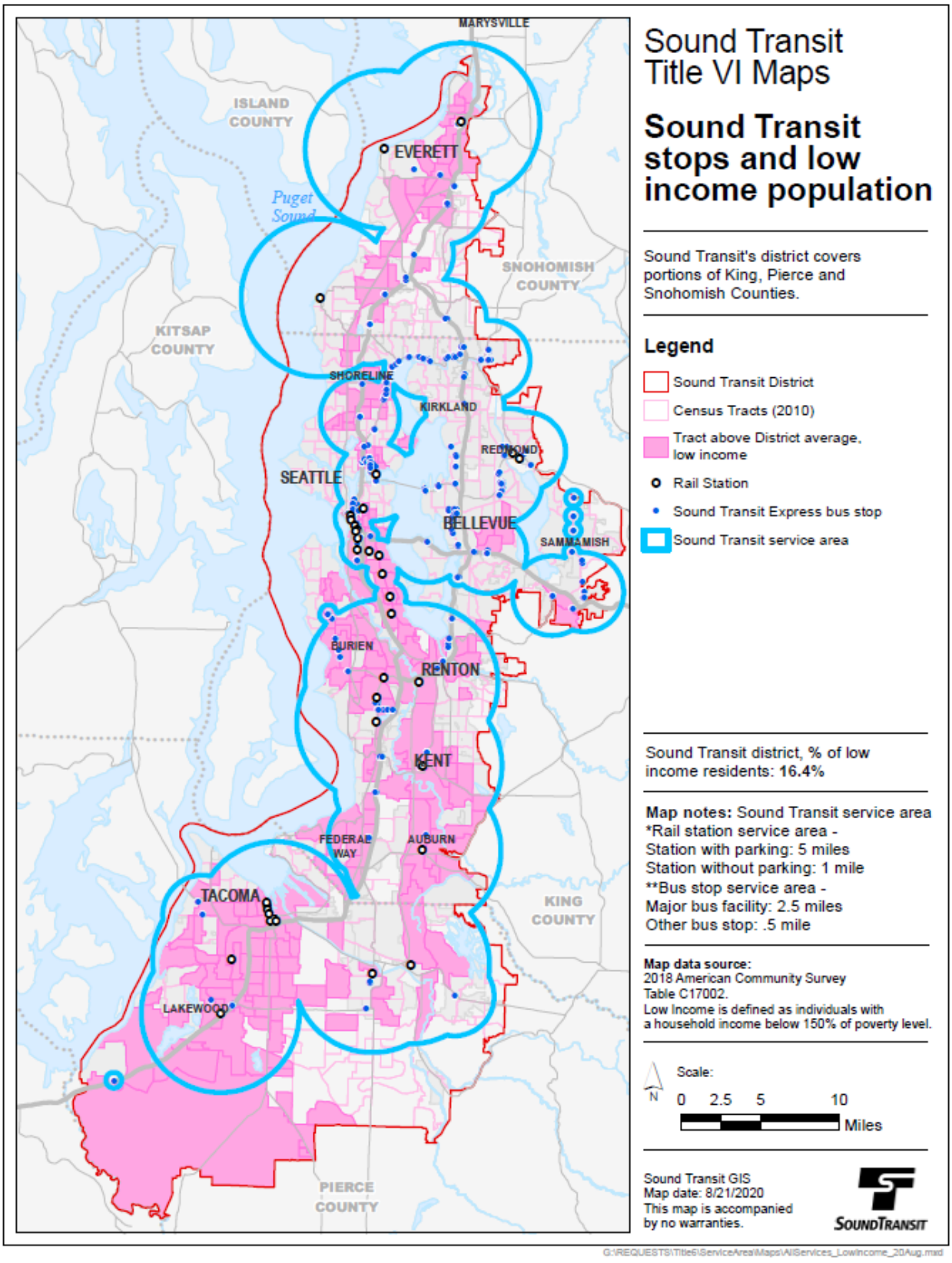
Title VI Populations (2018)	Percentage of District Population
Minority	39.7%
Low Income (150% Poverty)	16.4%
Limited English Proficiency	10.1%

Table A-2 shows the Title VI population averages for the Sound Transit service area using the American Community Survey 5-year estimates 2018 dataset. Minority and low-income averages serve as a comparison in the service change analysis to determine if mitigation must be considered, while LEP averages help to advise the outreach strategy. The maps on the next several pages (Maps A-1 to A-3) show census tracts with minority and low-income populations above the Sound Transit district average.

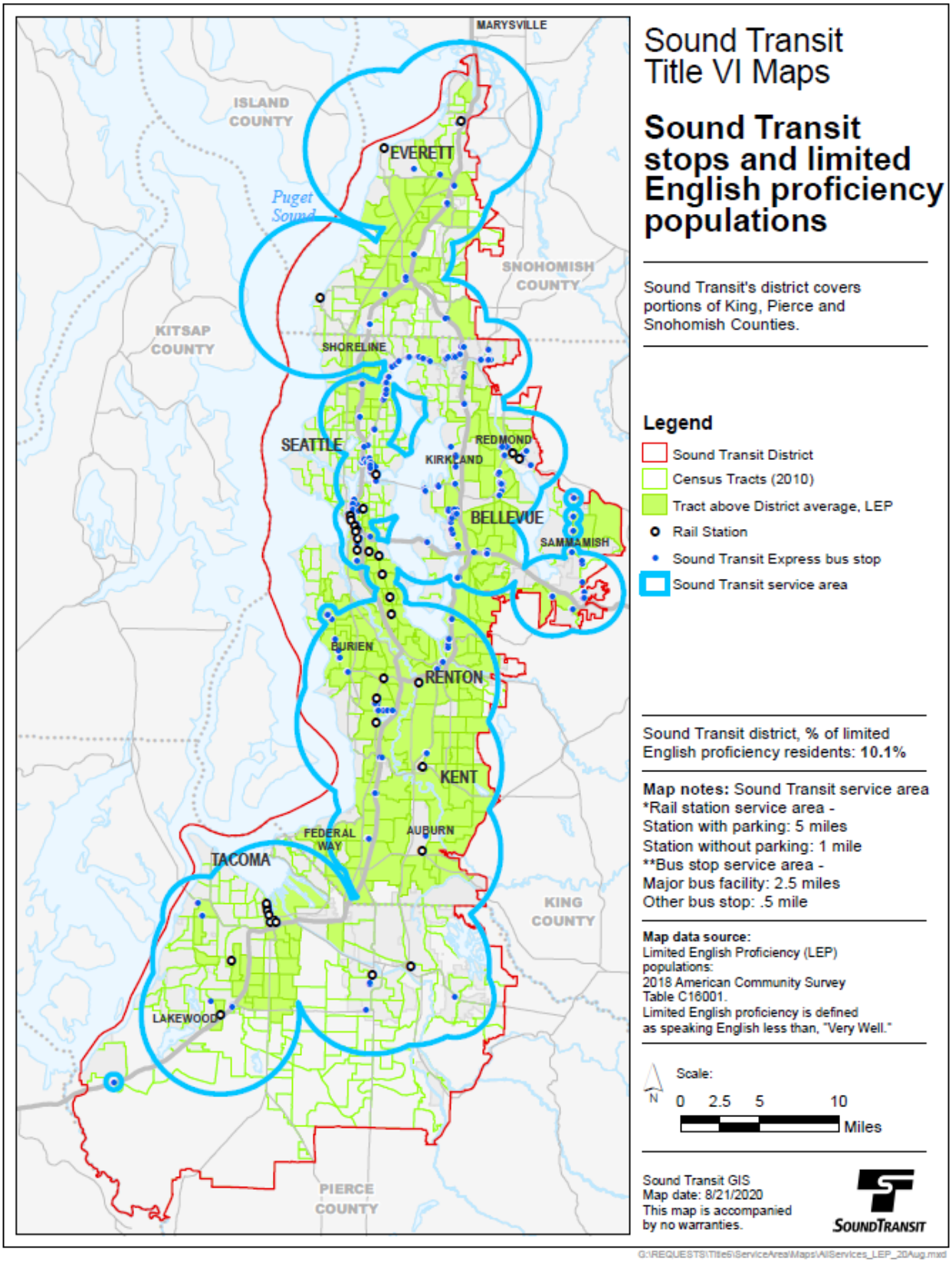
Map A-1 Minority populations above Sound Transit District Average



Map A-2 Low In come population above Sound Transit District Average



Map A-3 Limited English Proficiency populations above Sound Transit District Average



Comparison of Impacted Populations by Proposed Service Change

Table A-3 COVID Service Reductions March 2020-March 2021

Route	Minority Population (2018 Census)	Low Income Population (2018 Census)	Limited English Proficiency Population (2018 Census)	Type of Proposed Service Change	Change in Weekly Platform Hours	% Change in Platform Hours
510	No	Yes	Yes	Service Reduction	-160.7	-37.8%
511	No	No	Yes	Service Reduction	-52.7	-16.7%
512	No	Yes	No	Service Reduction	21.3	1.8%
513	No	Yes	Yes	Service Reduction	-76.9	-41.6%
522	No	No	No	Service Reduction	-67.6	-6.0%
532	No	No	Yes	Service Reduction	-189.2	-49.1%
535	No	No	Yes	Service Reduction	-141.5	-26.8%
541	No	No	No	Suspension	-60.0	-100.0%
542	No	No	No	Service Reduction	-78.6	-12.6%
544	Yes	No	Yes	Suspension	-505.0	-100.0%
545	Yes	No	Yes	Service Reduction	-166.4	-10.7%
550	Yes	No	Yes	Service Reduction	-186.4	-14.0%
554	Yes	No	No	Service Reduction	12.6	1.5%
555	No	No	No	Service Reduction	-90.0	-100.0%
556	No	No	No	Service Reduction	-210.0	-100.0%
560	Yes	Yes	Yes	No Change	-63.8	-8.0%
566	Yes	Yes	Yes	Service Reduction	-126.8	-18.9%
567	Yes	No	Yes	Suspension	-270.0	-100.0%
574	Yes	Yes	Yes	No Change	51.9	6.0%
577	Yes	Yes	Yes	No Change	5.4	1.1%
578	Yes	Yes	No	Service Increase	157.7	24.2%
580	Yes	Yes	No	Service Reduction	-20.2	-23.7%
586	Yes	Yes	No	Service Reduction	-59.4	-25.8%
590	Yes	Yes	No	Service Reduction	-67.4	-7.4%
592	Yes	Yes	No	Service Reduction	-112.0	-25.2%
594	Yes	Yes	No	No Change	35.1	3.7%
595	No	Yes	No	Service Reduction; New Stop	-95.0	-51.4%
596	No	No	No	Service Reduction	-13.3	-15.6%
Link	Yes	Yes	Yes	Service Reduction	-508.8	-25.3%
Sounder North	No	Yes	Yes	Service Reduction	-15.3	-43.8%
Sounder South	Yes	Yes	Yes	Service Reduction	-72.8	-26.5%
Tacoma Link	Yes	Yes	No	No Change	0.0	0.0%

Table A-4 Northgate Changes: Proposed Changes to September 2021 compared to March 2020 Baseline

Route	Minority Population (2018 Census)	Low Income Population (2018 Census)	Limited English Proficiency Population (2018 Census)	Type of Proposed Service Change	Change in Weekly Platform Hours	% Change in Platform Hours	Avg Change in Miles, One-Way
510	No	Yes	Yes	Service Reduction	-160.7	-37.8%	0.0
511	No	No	Yes	Truncation	140.2	-44.2%	-7.4
512	No	Yes	No	Truncation	-249.1	-21.4%	-7.5
513	No	Yes	Yes	Truncation	3.2	%1.7	-8.7
522	No	No	No	Truncation	-263.3	-23.2%	-6.4
532	No	No	Yes	Service Reduction	-189.2	-49.1%	0.0
535	No	No	Yes	Service Reduction	-141.5	-26.8%	0.0
541	No	No	No	Suspension	-60.0	-100.0%	0.0
542	No	No	No	Truncation	-198.5	-31.9%	-1.5
544	Yes	No	Yes	Suspension	-505.0	-100.0%	0.0
545	Yes	No	Yes	Service Reduction	-166.4	-10.7%	0.0
550	Yes	No	Yes	Service Reduction	-186.4	-14.0%	0.0
554	Yes	No	No	Service Reduction	12.6	1.5%	0.0
555	No	No	No	Truncation	-58.9	-65.4%	-4.2
556	No	No	No	Truncation	-76.7	-36.5%	-4.0
560	Yes	Yes	Yes	No Change	-63.8	-8.0%	0.0
566	Yes	Yes	Yes	Service Reduction	-126.8	-18.9%	0.0
567	Yes	No	Yes	Suspension	-270.0	-100.0%	0.0
574	Yes	Yes	Yes	No Change	51.9	6.0%	0.0
577	Yes	Yes	Yes	No Change	5.4	1.1%	0.0
578	Yes	Yes	No	Service Increase	157.7	24.2%	0.0
580	Yes	Yes	No	Service Reduction	-20.2	-23.7%	0.0
586	Yes	Yes	No	Elimination	-230.0	-100.0%	-37.1
590	Yes	Yes	No	Service Reduction	-67.4	-7.4%	0.0
592	Yes	Yes	No	Service Reduction	-112.0	-25.2%	0.0
594	Yes	Yes	No	No Change	35.1	3.7%	0.0
595	No	Yes	No	Service Reduction; New Stop	-95.0	-51.4%	-32.9
596	No	No	No	Service Reduction	-13.3	-15.6%	0.0
Link	Yes	Yes	Yes	Service Reduction	-349.4	-17.4%	4.6
Sounder North	No	Yes	Yes	Service Reduction	-15.3	-43.8%	0.0
Sounder South	Yes	Yes	Yes	Service Reduction	-72.8	-26.5%	0.0
Tacoma Link	Yes	Yes	No	No Change	0.0	0.0%	0.0

Draft Fare Equity Analysis of ST Express Service Changes with Opening of Northgate Link Extension

Description of Fare Changes

Regular adult fares on Link light rail are established by a distance-based policy last updated in November, 2014. (Sound Transit Board of Directors Resolution R2014-28)

Although the existing fare structure will apply to riders using the three new stations, the new light rail segment and associated proposed changes in bus service will alter some customers' rides and how they pay their fares. Sound Transit proposes to terminate service on Routes 511, 512, and 513 at the new Link light rail station at Northgate, and service on Route 522 at the new Roosevelt Link station, to better coordinate services. This will require those customers who previously made their trips solely by ST Express service on these routes to transfer between ST Express bus service and Link light rail. For certain customers, the transfer introduced by these service changes and the light rail extension will create a change in the fare they pay.

Policies and definitions

Fare equity analysis policy

Sound Transit Board of Directors Resolution R2013-19 established policies for conducting equity analyses of fare changes impacting minority and low income populations.

The policy directs Sound Transit to conduct a fare equity analysis prior to making any fare change to analyze potential adverse effects on minority and low income populations and establishes the following thresholds for determining whether the proposed fare change would have a disparate impact on minority populations and/or a disproportionate burden on low-income populations:

> *A disparate impact occurs when the minority percentage of the population adversely affected by a fare change is greater than the average minority percentage of the population of Sound Transit's service area.*
>
> *A disproportionate burden occurs when the low income percentage of the population adversely affected by a fare change is greater than the average low income percentage of the population of Sound Transit's service area.*

Per Sound Transit's policy, if any disparate impact or disproportionate burden is found during the fare equity analysis, Sound Transit will consider steps to avoid, minimize, or mitigate the adverse impacts and reanalyze the modified changes to determine if the impacts are removed or lessened.

Link fare policy and rates

All central Puget Sound transit services utilize the RFID-enabled fare card One Regional Card for All (ORCA). Payment for transit fare through ORCA can be made using "E-Purse" (debit) or a pass product. Pass products are associated with a one-way fare value. For the purposes of this analysis, seven fare types are considered: Adult cash/ticket, adult ORCA, adult low income ORCA ("ORCA LIFT"), Regional Reduced Fare Permit (RRFP) cash/ticket and ORCA, and Youth cash/ticket and ORCA. RRFP ORCA permits are available to senior citizens (65+ years old) and persons with qualifying disabilities. RRFP card holders may use their RRFP cards in the same way as an ORCA card, or may present the card to validate a cash/ticket payment at the RRFP fare rate. Riders aged 6-18 are eligible for Youth fare, which can be paid through ORCA or cash/tickets with ID.

Per Sound Transit Board Resolution R2014-28 in November 2014, rates were adjusted so that the adult one-way base fare for Link light rail was set at $2.25, with a flat, $1.50 fare for low income adults paying with an ORCA LIFT card. For full-fare adult one-way trips, a per-mile charge of $0.05, rounded up or down to the nearest $0.25 is added to the base fare to determine the fare for any given pair of stations. ORCA LIFT, Youth and RRFP fares are flat rates (not distance-based). The current and future one-way Link light rail fares for pre- and post-extension are shown in Tables 1 and 2.

Table A-5 shows regular adult one-way fares. The yellow-shaded cells show the fares for trips originating or ending in the new stations. As shown in Table A-5, the fares for the existing alignment range from $2.25 to $3.25. The base one-way full adult fare for the new stations is $2.25, the same cost as the base one-way adult fare for the existing stations. A trip for the entire length of the line will be $3.50. This is $0.25 higher than the current maximum fare because of the 4.3 mile extension from the UW

Station to Northgate. Table A-6 shows current and future one-way fares for reduced fare customers (ORCA LIFT, Youth, RRFP-Senior/Disabled), which are not distance-based and will not change after the opening of the light rail extensions. Table A-7 shows ST Express bus fares for all customer categories.

Current Sound Transit fare policy grants a two-hour transfer credit among different Sound Transit modes (light rail, express bus, and commuter rail) and between Sound Transit and ORCA partner transit agency services for customers using ORCA. Customers paying with cash or mobile tickets do not receive transfer credits.

Table A-5: Current and future one-way adult fares for Link light rail

	Northgate	Roosevelt	U-District	University of Washington	Capitol Hill	Westlake	University St.	Pioneer Square	International District	Stadium	Sodo	Beacon Hill	Mount Baker	Columbia City	Othello	Rainier Beach	Tukwila Intl. Blvd.	SeaTac / Airport
Northgate		$2.25	$2.50	$2.50	$2.50	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$3.00	$3.00	$3.00	$3.25	$3.50
Roosevelt	$2.25		$2.25	$2.25	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.75	$2.75	$2.75	$2.75	$3.00	$3.00	$3.25	$3.25
U-District	$2.50	$2.25		$2.25	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.75	$2.75	$2.75	$2.75	$3.00	$3.25	$3.25
University of Washington	$2.50	$2.25	$2.25		$2.25	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.75	$2.75	$2.75	$3.00	$3.25
Capitol Hill	$2.50	$2.50	$2.50	$2.25		$2.25	$2.25	$2.25	$2.25	$2.25	$2.25	$2.50	$2.50	$2.50	$2.50		$3.00	$3.00
Westlake	$2.75	$2.50	$2.50	$2.50	$2.25		$2.25	$2.25	$2.25	$2.25	$2.25	$2.25	$2.50	$2.50	$2.50	$2.50	$3.00	$3.00
University St.	$2.75	$2.50	$2.50	$2.50	$2.25	$2.25		$2.25	$2.25	$2.25	$2.25	$2.25	$2.50	$2.50	$2.50	$2.50	$3.00	$3.00
Pioneer Square	$2.75	$2.50	$2.50	$2.50	$2.25	$2.25	$2.25		$2.25	$2.25	$2.25	$2.25	$2.50	$2.50	$2.50	$2.50	$3.00	$3.00
International District	$2.75	$2.50	$2.50	$2.50	$2.25	$2.25	$2.25	$2.25		$2.25	$2.25	$2.25	$2.50	$2.50	$2.50	$2.50	$3.00	$3.00
Stadium	$2.75	$2.50	$2.50	$2.50	$2.25	$2.25	$2.25	$2.25	$2.25		$2.25	$2.25	$2.25	$2.25	$2.50	$2.50	$2.75	$3.00
Sodo	$2.75	$2.75	$2.50	$2.50	$2.25	$2.25	$2.25	$2.25	$2.25	$2.25		$2.25	$2.25	$2.25	$2.50	$2.50	$2.75	$2.75
Beacon Hill	$2.75	$2.75	$2.75	$2.50	$2.50	$2.25	$2.25	$2.25	$2.25	$2.25	$2.25		$2.25	$2.25	$2.50	$2.50	$2.75	$2.75
Mount Baker	$2.75	$2.75	$2.75	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.25	$2.25	$2.25		$2.25	$2.25	$2.50	$2.75	$2.75
Columbia City	$3.00	$2.75	$2.75	$2.75	$2.50	$2.50	$2.50	$2.50	$2.50	$2.25	$2.25	$2.25	$2.25		$2.25	$2.25	$2.50	$2.75
Othello	$3.00	$3.00	$2.75	$2.75	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.25	$2.25		$2.50	$2.50	$2.75
Rainier Beach	$3.00	$3.00	$3.00	$2.75	$2.75	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.25	$2.25		$2.50	$2.50
Tukwila Intl. Blvd.	$3.25	$3.25	$3.25	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$2.75	$2.75	$2.75	$2.75	$2.50	$2.50	$2.50		$2.25
SeaTac / Airport	$3.50	$3.25	$3.25	$3.25	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$2.75	$2.75	$2.75	$2.75	$2.75	$2.50	$2.25	
Angle Lake	$3.50	$3.25	$3.25	$3.25	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$2.75	$2.75	$2.75	$2.50	$2.25

Table A-6: Current and future fares for reduced fare customers for Link light rail

Customer Fare Category	Current Fare (before Northgate opens)	Future Fare (after Northgate opens)
Low-income adult (ORCA LIFT)	$1.50	$1.50
Youth (6-18 years old)	$1.50	$1.50
Senior/Disabled with Regional Reduced Fare Permit	$1.00	$1.00

Table A-7: ST Express Fares

Customer Category	Fare
Adult	$3.25
Low-income adult (ORCA LIFT)	$1.50
Youth (6-18 years old)	$1.50
Senior/Disabled with Regional Reduced Fare Permit	$1.00

Data set description and technique used to collect data

The data used in this analysis are from an origin-destination (O-D) survey conducted onboard Sound Transit Express bus routes which are planned to terminate at the Northgate or Roosevelt Link stations with the opening of the Northgate Link extension – Routes 511, 512, 513, 522. These surveys were conducted in the first quarter of 2019. The survey was conducted during weekdays for all time periods using paper surveys offered to every rider for sampled trips. Survey workers remained on board during the entire trip or portion of the trip surveyed. Customers could return surveys to the survey workers or by postage paid return mail.

Overall, the survey included responses from about 9,500 ST Express riders (representing 19% of average weekday boardings, with a 43% response rate), including about 1,900 ST Express riders surveyed on those routes that will be terminated (19% of average weekday boardings, 41% response rate). Data were weighted to represent average weekday boardings at the route level.

For this analysis, low Income is defined as at or below 200% of the Federal poverty level. This is the same threshold used to qualify customers for the ORCA LIFT (low-income fare) program. Table A-8 below describes the household size and income thresholds used to classify respondents as Low Income for this analysis.

Table A-8: Household size and income to qualify for ORCA LIFT

Household size	Annual household Income
1	$24,972
2	$33,816
3	$42,660
4	$51,492
5+	$60,300

As described earlier, Sound Transit policy calls for a comparison of the impacts of a fare change on minority and low income populations to the population of Sound Transit's service area. The service area numbers used in this report are derived from the American Community Survey, 2018.

Fare media analysis

Table A-9 on the next page shows the number and percent of minority and low-income riders in each customer category paying cash or using ORCA from the O-D survey effort described above. As also noted above, the counts are representative of data weighted to average weekday ridership for the routes of focus here.

Table A-9. Current fare type usage by minority and low-income for ST Express Routes to be terminated

Fare Type	Percent				Count			
	Minority	Non-Minority	Low-Income	Non Low-Income	Minority	Non-Minority	Low-Income	Non Low-Income
Adult Cash/Ticket	0%	100%	0%	100%	-	15	-	15
Adult ORCA	32%	68%	16%	84%	1,619	3,384	800	4,203
ORCA LIFT	50%	50%	81%	19%	111	110	180	42
RRFP Cash	NA	NA	NA	NA	-	-	-	-
RRFP ORCA	25%	75%	31%	69%	95	284	117	262
Youth Cash	NA	NA	NA	NA	-	-	-	-
Youth ORCA	63%	37%	73%	27%	33	19	38	14
Total	32%	68%	20%	80%	1,858	3,812	1,135	4,536
ST Service Area	23%	77%	40%	60%				

The survey data indicate there are greater percentages of minority riders on the routes to be terminated than in the ST service area for the following customer categories: 1) full fare adult riders using ORCA fare payment, 2) ORCA LIFT riders, 3) RRFP riders using ORCA, and Youth riders using ORCA. The survey data also indicate there is a greater percentage of Youth riders using ORCA on these routes who are low-income than the percentage of all low-income riders in the service area as a whole, though the total sample of Youth riders is quite small.

The survey data on fare payment type by customer type shows no minority and low-income riders surveyed who currently pay cash on impacted routes. The large majority of adult riders use ORCA. Survey results also show the vast majority of riders are full-fare adult, with few ORCA LIFT, RRFP and Youth riders. The survey also yielded no RRFP and Youth riders paying cash.

Disparate Impact/Disproportionate Burden

As noted above, Sound Transit provides a discounted flat fare for low-income Adult riders via the ORCA LIFT fare. Sound Transit's flat-rate discounted fares for Youth, Seniors and Disabled riders also provide a discounted fare for low-income riders in these customer categories. These discounted fares are the same on ST Express and Link. Since ORCA provides transfer credits, riders in these fare categories paying with ORCA cards will see no fare change when transferring between ST Express service and Link.

As Table A-10 shows, only cash riders in each category will be impacted by route termination. ORCA riders will see no impact. Since the survey yielded no cash minority or low-income cash riders on these routes, this analysis shows no disparate impacts on minority nor disproportionate impacts on low-income riders.

Table A-10. New Fares for Current Express Bus Customers Terminating at Northgate Link

Fare Type	Fare			Change			
	Existing	Proposed -low	Proposed - high	$ change - low	$ change - high	% change - low	% change - high
Adult Cash/Ticket	$ 3.25	$5.75	$6.00	$2.50	$2.75	77%	85%
Adult ORCA	$3.25	$3.25	$3.25	$ -	$ -	0%	0%
ORCA LIFT	$1.50	$1.50	$1.50	$ -	$ -	0%	0%
RRFP Cash	$1.00	$2.00	$2.00	$1.00	$1.00	100%	100%
RRFP ORCA	$1.00	$1.00	$1.00	$ -	$ -	0%	0%
Youth Cash	$1.50	$3.00	$3.00	$1.50	$1.50	100%	100%
Youth ORCA	$1.50	$1.50	$1.50	$ -	$ -	0%	0%

The results of this analysis are summarized in Table A-11.

- If the percentage of minority or low-income riders in a customer category is less than the ST service area average, there is no disparate impact or disproportionate burden.
- The percentage of minority riders on these routes was higher than the average for the ST service area for full fare Adult ORCA, ORCA LIFT, RRFP Orca and Youth ORCA riders.
- The percentage of low-income riders on these routes was higher than the ST service area average for ORCA LIFT riders.
- With none of these fare categories experiencing a fare change from the termination of these routes and transferring to Link at Northgate, there is no disparate impact/disproportionate burden.

Table A-11: Summary – Disparate Impact/Disproportionate Burden

	% Greater than ST Service Area Avg		Fare Change?		Disproportionate Impact/Disparate Burden	
Fare Type	Minority	Low-Income	Minority	Low-Income	**Minority**	**Low-Income**
Adult Cash/Ticket	NO	NO			**NO**	**NO**
Adult ORCA	YES	NO	NO		**NO**	**NO**
ORCA LIFT	YES	YES	NO	NO	**NO**	**NO**
RRFP Cash	NO	NO			**NO**	**NO**
RRFP ORCA	YES	NO	NO		**NO**	**NO**
Youth Cash	NO	NO			**NO**	**NO**
Youth ORCA	YES	NO	NO	NO	**NO**	**NO**

Fare Impact Mitigation

The onboard surveys identified very few adult cash riders and no Youth or RRFP riders on the ST Express routes planned to terminate at Northgate. The Title VI analysis identified no disparate impact/disproportionate burden. However, there will be impacts on current cash riders whose current one-seat bus ride will be replaced by a two-seat (and two-fare) ride involving a transfer between bus and light rail. To mitigate these impacts, ST will be working to make it easy for cash riders to convert to use of ORCA cards rather than cash for fare payment. ORCA card fare payment will enable riders to receive full transfer value between modes and experience no fare increase.

Sound Transit will work to provide ORCA cards to cash-paying riders transferring between bus and light rail services during the first few weeks of light rail service. To assist cash riders to convert to ORCA, Sound Transit will provide cash riders with ORCA cards pre-loaded with E-purse value or passes. Sound Transit will also continue the ongoing marketing campaign to promote the ORCA LIFT program for low-income riders. Sound Transit will continue loading E-purse incentives on ORCA LIFT cards for those who qualify for this program. Finally, Sound Transit will work with King County Metro and Public Health staff who will also be on site at the new stations actively enrolling riders for reduced fare, youth and ORCA LIFT discounted fare programs. Riders new to ORCA will also be provided information on how to use the card, and how and where to revalue, including online, retailers and TVMs at Link stations.

These efforts will be accompanied by an extensive public outreach and information campaign to inform riders of the need to use an ORCA card to ensure they can continue riding for a single fare (and avoid having to pay a higher fare through payment of two separate cash fares) for any transfer trips following the service change.